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PARTS 0 TO 50

Revised as of January 1, 1991

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Revised as of January 1, 1991

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AS OF JANUARY 1, 1991

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Cite this Code: **CFR**

To cite the regulations in this volume use title, part and section number. Thus, 10 CFR 0.735-1 *refers to title 10, part 0, section 735-1.*

Explanation

The Code of Federal Regulations is a codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the Federal Government. The Code is divided into 50 titles which represent broad areas subject to Federal regulation. Each title is divided into chapters which usually bear the name of the issuing agency. Each chapter is further subdivided into parts covering specific regulatory areas.

ISSUE DATES

Each volume of the Code is revised at least once each calendar year and issued on a quarterly basis approximately as follows:

Title 1 through Title 16...as of January 1
Title 17 through Title 27...as of April 1
Title 28 through Title 41...as of July 1
Title 42 through Title 50...as of October 1

The appropriate revision date is printed on the cover of each volume.

LEGAL STATUS

The contents of the Federal Register are required to be judicially noticed (44 U.S.C. 1507). The Code of Federal Regulations is prima facie evidence of the text of the original documents (44 U.S.C. 1510).

HOW TO USE THE CODE OF FEDERAL REGULATIONS

The Code of Federal Regulations is kept up to date by the individual issues of the Federal Register. These two publications must be used together to determine the latest version of any given rule.

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The Paperwork Reduction Act of 1980 (Pub. L. 96-511) requires Federal agencies to display an OMB control number with their information collection request. Many agencies have begun publishing numerous OMB control numbers as amendments to existing regulations in the CFR. These OMB numbers are placed as close as possible to the applicable recordkeeping or reporting requirements.

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Provisions that become obsolete before the revision date stated on the cover of each volume are not carried. Code users may find the text of provisions in effect on a given date in the past by using the appropriate numerical list of sections affected. For the period before January 1, 1986, consult either the List of CFR Sections Affected, 1949-1963, 1964-1972, or 1973-1985, published in seven separate volumes. For the period beginning January 1, 1986, a "List of CFR Sections Affected" is published at the end of each CFR volume.

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What is incorporation by reference? Incorporation by reference was established by statute and allows Federal agencies to meet the requirement to publish regulations in the Federal Register by referring to materials already published elsewhere. For an incorporation to be valid, the Director of the Federal Register must approve it. The legal effect of incorporation by reference is that the material is treated as if it were published in full in the Federal Register (5 U.S.C. 552(a)). This material, like any other properly issued regulation, has the force of law.

What is a proper incorporation by reference? The Director of the Federal Register will approve an incorporation by reference only when the requirements of 1 CFR part 51 are met. Some of the elements on which approval is based are:

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(b) The matter incorporated is in fact available to the extent necessary to afford fairness and uniformity in the administrative process.

(c) The incorporating document is drafted and submitted for publication in accordance with 1 CFR part 51.

Properly approved incorporations by reference in this volume are listed in the Finding Aids at the end of this volume.

What if the material incorporated by reference cannot be found? If you have any problem locating or obtaining a copy of material listed in the Finding Aids of this volume as an approved incorporation by reference, please contact the agency that issued the regulation containing that incorporation. If, after contacting the agency, you find the material is not available, please notify the Director of the Federal Register, National Archives and Records Administration, Washington DC 20408, or call (202) 523-4534.

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An index to the text of "Title 3—The President" is carried within that volume.

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REPUBLICATION OF MATERIAL

There are no restrictions on the republication of material appearing in the Code of Federal Regulations.

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For a summary, legal interpretation, or other explanation of any regulation in this volume, contact the issuing agency. Inquiries concerning editing procedures and reference assistance with respect to the Code of Federal Regulations may be addressed to the Director, Office of the Federal Register, National Archives and Records Administration, Washington, DC 20408 (telephone 202-523-3517). Sales are handled exclusively by the Superintendent of Documents, Government Printing Office, Washington, DC 20402 (telephone 202-783-3238).

MARTHA L. GIRARD,
Director,
Office of the Federal Register.

January 1, 1991.

THIS TITLE

Title 10—ENERGY is composed of five volumes. The parts in these volumes are arranged in the following order: Parts 0-50, 51-199, 200-399, 400-499 and Part 500-End. The first and second volumes containing Parts 0-199 are comprised of Chapter I— Nuclear Regulatory Commission. The third, fourth, and fifth volumes containing Part 200-End are comprised of Chapters II, III and X—Department of Energy and Chapter XV—Office of the Federal Inspector for the Alaska Natural Gas Transportation System. The contents of these volumes represent all current regulations codified under this title of the CFR as of January 1, 1991.

For this volume Linda L. Jones was Chief Editor. The Code of Federal Regulations publication program is under the direction of Richard L. Claypoole, assisted by Alomha S. Morris.

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Title 10—Energy

(This book contains Parts 0 to 50)

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CHAPTER I—Nuclear Regulatory Commission 0

CHAPTER I—NUCLEAR REGULATORY COMMISSION

Editorial Note: For nomenclature changes to Chapter I, see 47 FR 41337, Sept. 20, 1982.

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EDITORIAL NOTE: Chapter I—Nuclear Regulatory Commission is continued in the volume containing 10 CFR Parts 51 to 199.

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ANNEX A—CODE OF ETHICS FOR GOVERNMENT SERVICE (5 U.S.C. 7301)

AUTHORITY: Secs. 25, 161, 68 Stat. 925, 948, as amended (42 U.S.C. 2035, 2201); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841); E.O. 11222, 30 FR 6469, 3 CFR 1964-1965 COMP., p. 306; 5 CFR 735.104.

Sections 0.735-21 and 0.735-29 also issued under 5 U.S.C. 552, 553. Section 0.735-26 also issued under secs. 501, 502, Pub. L. 95-521, 92 Stat. 1864, 1867, as amended by secs. 1, 2, Pub. L. 96-28, 93 Stat. 76, 77 (18 U.S.C. 207).

SOURCE: 31 FR 4502, Mar. 17, 1966, unless otherwise noted.

Subpart A—General

§ 0.735–1 Policy.

(a) The personnel policy of the U.S. Nuclear Regulatory Commission states, in part, that:

> The Atomic Energy Act requires the Commission to assure itself that the character, associations, and loyalty of workers in atomic energy are of a high order. Conduct and self discipline, both on and off the job, must measure up to unusual standards * * *.

(b) Section 735.101 of the Civil Service Commission regulations (5 CFR 735.101), issued pursuant to Executive Order 11222, May 8, 1965, states that:

> The maintenance of unusually high standards of honesty, integrity, impartiality, and conduct by Government employees and special Government employees is essential to assure the proper performance of the Government business and the maintenance of confidence by citizens in their Government.

The avoidance of misconduct and conflicts of interest on the part of Government employees and special Government employees through informed judgment is indispensable to the maintenance of these standards * * *.

§ 0.735-2 Program objective.

(a) The program objective is to protect the interests of the public and employees by setting forth principles, practices, and standards governing conduct of employees in such a manner that they may be readily understood by the individuals involved and practicably administered by the NRC.

(b) It is expected that the provisions of this part will be observed and administered in a manner which is consistent with both their spirit and their letter.

(c) Of necessity, because of the nature of the criminal statutes and the subject matter involved, this part cannot deal with all of the problems which may arise with regard to the conduct, including conflicts of interest, of employees and former employees.

§ 0.735-3 Responsibilities and authorities.

(a) Employees shall: (1) Comply with the statutes and the rules, standards of conduct, and other regulations set forth in this part.

(2) Consult the full text of applicable statutes as to whether an action in question may in any way violate the statutes.

(3) Be guided in all their activities by the Code of Ethics for Government Service (Annex A).

(4) Conduct themselves in such a manner as to create and maintain respect for the NRC and the U.S. Government and avoid situations which require or appear to require a balancing of private interests or obligations against official duties.

(5) Be mindful of the high standards of integrity expected of them in all their activities, personal and official.

(6) Not give or appear to give favored treatment or competitive advantage to any member of the public, including former employees of the NRC, appearing before them on their own behalf or on behalf of any nongovernmental interest.

(7) Recognize that violation of any of the instructions or statutes referred to in this part may subject them to disciplinary action by NRC in addition to the penalty prescribed by law for such violation.

(8) Discuss with their immediate supervisor, or counselor, as appropriate, any problem arising out of this part.

(9) Report to the Director of their Office all allegations or indications of misconduct, including fraud, graft, corruption, and diversion of NRC assets by NRC or contract employees; however, when the exigencies of the circumstances dictate, employees may make such reports directly to the Office of Inspector and Auditor.

(b) Supervisors: (1) Inform themselves of any problems of their employees arising out of this part, consult with the cognizant NRC counselor as appropriate, and take prompt action to see that the problems, if they cannot be resolved, are referred to higher authority.

(2) Relieve employees from assignments in accordance with § 0.735-22(a).

(c) The Executive Director for Operations assumes responsibilities assigned in §§ 0.735-21(b), 0.735-22(b), 0.735-23 (d) and (e), 0.735-26 (c) and (d), and 0.735-28.

(d) The Directors of Offices and Divisions. (1) Bring to the attention of appropriate contractors under their jurisdiction those provisions of this part (such as "Future Employment"; "Ex Parte Contacts"; "Assisting Former Employees"; "Gifts, Entertainment, and Favors"; "Cancellation of Contracts"; and others) which may affect the actions of a contractor and his employees in dealing with NRC employees.

(2) Report to the Office of Inspector General all complaints concerning fraud, graft, corruption, diversion of NRC assets by NRC employees or contractors, and misconduct of NRC employees; take action as a result of investigations; and report on action taken, as provided in NRC Manual Chapter 0702, "Notification and Investigation of Misconduct."

(3) Assume responsibilities assigned in §§ 0.735-21(b), 0.735-22(b), 0.735-

23(d), 0.735-27, 0.735-28, and 0.735-40(b).

(e) The Director, Office of Personnel—

(1) Provides a copy of this part to each employee and special Government employee, and to each new employee at the time of his or her entrance on duty.

(2) Provides a copy of all revisions to each employee and special Government employee.

(3) Brings the provisions of this part to the attention of each employee and special Government employee annually, and at such other times as circumstances warrant.

(4) Assures the availability of counseling services under paragraph (h) of this section to each employee and special Government employee.

(5) Has available for review by employees and special Government employees, as appropriate, copies of laws, Executive Order 11222, NRC regulations, and pertinent Office of Personnel Management regulations and instructions relating to ethical and other conduct.

(6) Notifies employees and special Government employees at time of entrance on duty and periodically thereafter of the availability of counseling services under paragraph (h) of this section and how and where these services are available.

(f) The Director, Office of Personnel, assumes the responsibilities assigned in §§ 0.735-28(b) and 0.735-49.

(g) The Office of Inspector General investigates all questions of employees' conduct, fraud, etc., in NRC in accordance with NRC Manual Chapter 0702.

(h) The General Counsel. (1) Is the counselor for NRC.

(2) Serves as NRC's designee to the Office of Personnel Management on matters covered by this part.

(3) Designates deputy counselors.

(4) Coordinates counseling services, and assures that counseling and interpretations on questions of conflicts of interest and other matters covered by the part are available to deputy counselors.

(5) Carries out the specific responsibilities assigned in §§ 0.735-27, 0.735-28, and 0.735-49(b).

[31 FR 4502, Mar. 17, 1966, as amended at 40 FR 8775, Mar. 3, 1975; 40 FR 20268, May 9, 1975; 42 FR 20138, Apr. 18, 1977; 44 FR 62881, Nov. 1, 1979; 46 FR 51715, Oct. 22, 1981; 52 FR 31608, Aug. 21, 1987; 55 FR 47741, Nov. 15, 1990]

§ 0.735-4 Definitions.

(a) "Commission" means the Commission of five members or a quorum thereof sitting as a body, as provided by section 201 of the Energy Reorganization Act of 1974, 88 Stat. 1233.

(b) "NRC" means the agency established by Title II of the Energy Reorganization Act of 1974 comprising the members of the Commission and all offices, employees, and representatives authorized to act in any case or matter, whether clothed with final authority or not.

(c) "Employee" means an NRC officer or employee and, insofar as statutory and Executive order restrictions are concerned, a member of the Commission, but does not include (unless otherwise indicated) a special Government employee, or an employee of another Government agency assigned or detailed to the NRC.

(d) "Former employee" means a former NRC officer or employee as defined in paragraph (c) of this section, a former special Government employee, as defined in paragraph (e) of this section, a former member of the Nuclear Regulatory Commission, a former member of the Atomic Energy Commission, and a former officer or employee of the Atomic Energy Commission.

(e) "Special Government employee" means an officer or employee of the NRC who is retained, designated, appointed, or employed to perform, with or without compensation, for not to exceed 130 days during any period of 365 consecutive days, temporary duties either on a full-time or intermittent basis. The term includes NRC consultants, experts, and members of advisory boards, but does not include a member of the Uniformed Services.

(f) "Official responsibility" means the direct administrative or operating authority, whether intermediate or final, and either exercisable alone or with others, and either personally or through subordinates, to approve, disapprove, or otherwise direct Government action.

(g) "Organization," as used in this part in connection with 18 U.S.C. 208, means universities, foundations, nonprofit research entities and similar nonprofit organizations, States, countries and municipalities and subdivisions thereof as well as business organizations.

(h) "Person" means an individual, a corporation, a company, an association, a firm, a partnership, a society, a joint stock company, or any other organization or institution.

[31 FR 4502, Mar. 17, 1966, as amended at 40 FR 8775, Mar. 3, 1975]

§ 0.735-5 Basic requirements.

(a) *Applicability.* The provisions of this part apply to all current and former NRC employees and special Government employees. Except for § 0.735-28, the provisions of this part are not applicable to employees of other Government agencies assigned or detailed to the NRC. Employees of other Government agencies assigned or detailed to the NRC are required by § 0.735-28 to furnish a statement of employment and financial interests if they are performing duties of a position specified in § 0.735-28(a). However, an employee of another Government agency assigned or detailed to the NRC is not relieved of his responsibilities under regulations or code of conduct prescribed by his parent agency.

(b) *Cancellation of contracts.* The Commission reserves the right to declare void, in accordance with law, any contract negotiated or administered in violation of the provisions of NRC regulations, or statute.

(c) *Scope of part.* This part incorporates the statutes, the instructions and specific procedures, pertaining to an employee's conduct.

(d) *Construction of criminal or civil statutes.* The paraphrased version of any criminal or civil statute in this part shall not constitute a binding interpretation thereof upon the NRC or the Federal Government.

(e) *Certifications.* Certifications called for by §§ 0.735-23(e) and 0.735-26(c) and (d) shall be submitted for publication in the FEDERAL REGISTER.

(f) *Disciplinary and other remedial action.* (1) A violation of the regulations in this part by an employee or special Government employee may be cause for appropriate disciplinary action which may be in addition to any penalty prescribed by law.

(2) Remedial action, whether disciplinary or otherwise, shall be effected in accordance with any applicable laws, Executive orders and regulations.

(g) *Presidential appointees.* Presidential appointees covered by section 401(a) of Executive Order 11222 shall not receive compensation or anything of monetary value for any consultation, lecture, discussion, writing, or appearance the subject matter of which is devoted substantially to the responsibilities, programs, or operations of NRC, or which draws substantially on official data or ideas which have not become part of the body of public information.

[31 FR 4502, Mar. 17, 1966, as amended at 40 FR 8775, Mar. 3, 1975]

§ 0.735-6 National emergency application.

The provisions of this part continue in effect without modification in a national emergency.

§ 0.735-8 Information collection requirements: OMB approval.

The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). In § 0.735-28, OMB has approved the information collection requirements contained in Form NRC-443, under control number 3150-0025.

[49 FR 19623, May 9, 1984]

Subpart B—Conflict of Interest Restrictions

§ 0.735-20 General.

(a) Part I, "Policy," of Executive Order 11222 states:

> Where government is based on the consent of the governed, every citizen is entitled to have complete confidence in the integrity of his government. Each individual

officer, employee, or adviser of government must help to earn and must honor that trust by his own integrity and conduct in all official actions.

(b) The elimination of conflicts of interest in the Federal service is one of the most important objectives in establishing general standards of conduct. A conflict of interest situation may exist where a Federal employee's private interests, usually of an economic form, conflict, or raise a reasonable question of conflict with his public duties and responsibilities. The potential conflict is of concern whether it is real or only apparent.

(c) An employee, including special Government employee, shall not: (1) Have a direct or indirect financial interest that conflicts substantially, or appears to conflict substantially, with his Government duties and responsibilities; or (2) engage in, directly or indirectly, a financial transaction as a result of, or primarily relying on, information obtained through his Government employment.

(d) An employee, including a Special Government employee, is not precluded from having a financial interest or engaging in financial transactions to the same extent as a private citizen not employed by the Government so long as it is not prohibited by the law, Executive Order 11222, Office of Personnel Management regulations, or the regulations in this part.

(e) Certain provisions in 18 U.S.C. 201-209, dealing with conflicts of interest in Federal employment are referred to in §§ 0.735-21 through 0.735-27.

[31 FR 4502, Mar. 17, 1966, as amended at 46 FR 51716, Oct. 22, 1981]

§ 0.735-21 Acts affecting a personal financial interest (based on 18 U.S.C. 208).

(a) *General.* Except as permitted by paragraphs (b), (c), and (d) of this section, no employee, or special Government employee, shall participate personally and substantially as a Government officer or employee, through decision, approval, disapproval, recommendation, the rendering of advice, investigation, or otherwise, in a judicial or other proceeding, application, request for a ruling or other determination, contract, claim, controversy, charge, accusation, arrest, or other particular matter in which, to the employee's knowledge, the employee, the employee's spouse, minor child, partner, organization in which the employee is serving as officer, director, trustee, partner, or employee, or any person or organization with whom the employee is negotiating or has any arrangement concerning prospective employment, has a financial interest upon which the outcome of the particular matter will have a direct and predictable effect.

(b) *Granting of ad hoc exemptions.* (1) If an employee, or special Government employee, desires to request an exemption from the prohibitions of paragraphs (a) and (e) of this section, the employee shall fully inform the appropriate agency official under paragraph (b)(6) of this section in writing of the nature and circumstances of the particular matter, the financial interests involved, and any other information relevant and material to the decision to be made under paragraph (b)(2) of this section, and shall request a written determination in advance as to the propriety of the employee's participation in such matter.

(2) If, after examining the information submitted and consulting with the Office of the General Counsel, the appropriate agency official under paragraph (b)(6) of this section determines that the employee, or special government employee, does have a conflict of interest, the official may relieve the employee from participation in the particular matter and so advise the employee in writing; or the appropriate agency official under paragraph (b)(6) of this section may approve the employee's participation in such matter upon advising the employee in writing that the appropriate agency official has determined that the interest is not so substantial as to be deemed likely to affect the integrity of the services which the Government may expect from such officer or employee, and that no provision of law and no regulation in this part would appear to be violated by the employee's participation in the particular matter.

(3) In the written decision, the appropriate agency official under paragraph (b)(6) of this section shall discuss the following factors as appropriate, and any other relevant and material information:

(i) The nature of the financial interest, an employment interest generally being deemed more substantial than an interest of another kind;

(ii) The size of the interest, both in absolute terms and in relation to the employee's other salary or liquid assets, and, in the case of any class of shares, bonds, or other security interests, the size of the interest in relation to the dollar value of the outstanding shares, bonds, or other security interests in the said class; and

(iii) The nature and significance of the services the employee would render to the agency in the particular matter; provided, however, that if the request for an exemption is being made by a special Government employee, the provisions of paragraph (d) of this section will apply.

(4) A copy of each request and response made under the provisions of paragraphs (b) (1) and (2) of this section as a matter of record will be forwarded to the Office of the General Counsel and maintained there. Copies of all documents referred to in paragraphs (b) (1) and (2) of this section will be filed by the holders thereof in their confidential files.

(5) Whenever it can be reasonably anticipated that there will be a need to invoke these procedures repeatedly, and where it also appears that a burden would be placed on the NRC thereby, consideration should be given by the appropriate official under paragraph (b)(6) of this section to dismissal or transfer of the employee, or special Government employee, to another position where the problems will not arise, or to the elimination of the outside interest creating the difficulty. It is expected that the employee or special Government employee concerned will take the initiative in resolving any problem in this area.

(6) Requests for exemptions under this paragraph will be submitted to the appropriate agency official, who is to be determined as follows:

(i) For employees in offices reporting to the Executive Director for Operations, the office director;

(ii) For office directors in offices reporting to the Executive Director for Operations and for members of the staff of the Executive Director for Operations, the Executive Director for Operations;

(iii) For employees in offices reporting to the Commission, the office director;

(iv) For employees of the Advisory Committee on Reactor Safeguards (ACRS), the Atomic Safety Licensing Board Panel (ASLBP), or the Atomic Safety and Licensing Appeal Panel (ASLAP), the Chairman of the ACRS, ASLBP, or ASLAP, respectively;

(v) For the Executive Director for Operations, members of the ACRS, ASLBP, or ASLAP, or the directors of offices reporting to the Commission, the Chairman of the Commission, except in cases involving policy formulation, when the Commission shall decide whether to grant the exemption; and

(vi) For employees in an individual Commissioner's office, that Commissioner.

(c) *Exemption of remote or inconsequential financial interests.* (1) In accordance with the provisions of 18 U.S.C. 208(b)(2) the NRC has exempted the following financial interests from paragraph (a) of this section and from the requirements of paragraph (b) of this section, upon the ground that such interests are too remote or too inconsequential to affect the integrity of its employees' services:

(i) Financial interests in an enterprise in the form of shares in the ownership thereof, including preferred and common stocks whether voting or nonvoting, and warrants to purchase such shares;

(ii) Financial interests in an enterprise in the form of bonds, notes, or other evidence of indebtedness;

(iii) Investments in State or local government bonds and investments in shares of a widely held diversified mutual fund or regulated investment company, except holdings in mutual investment funds or regulated investment companies dealing primarily in atomic energy stocks;

Provided, That in the case of paragraph (c)(1)(i) and (ii) of this section:

(A) The total market value of the financial interests described in said subdivisions with respect to any individual enterprise does not exceed $1000; and

(B) The holdings in any class of shares, or bonds, or other evidences of indebtedness, of the enterprise do not exceed 1 percent of the dollar value of the outstanding shares, or bonds or other evidences of indebtedness in said class.

(2) Where a person covered by this exemption is a member of a group organized for the purpose of investing in equity or debt securities, the interest of such person in any enterprise in which the group holds securities shall be based upon said person's equity share of the holdings of the group in that enterprise.

(3) For purposes of paragraph (c) (1) of this section, computations of dollar-value of financial interests in corporations shall be by means of:

(i) Market value in the case of stocks listed on national exchanges; or

(ii) Over-the-counter market quotations as reported by the National Daily Quotation Service in the case of unlisted stocks; or

(iii) By means of net book value (i.e. assets less liabilities) in the case of stocks not covered by the preceding two categories.

With respect to debt securities, face value shall be used for valuation purposes.

(4) The dollar value and percentage of financial interests listed above in paragraph (c)(1) of this section shall be computed as of the date on which the employee first participated personally and substantially in any particular matter, within the meaning of 18 U.S.C. 208(a), relating to the enterprise concerned. The dollar value and percentage so computed shall govern during the entire period that the employee participates in the particular matter unless, after the aforesaid date of computation, he, or other person or organization referred to in paragraph (a) of this section, acquires an additional interest in the same enterprise. In the event of such subsequent acquisition, the dollar value and percentage shall be recomputed as of the date of such acquisition. If, in such case, the dollar value and percentage computed exceeds the limitations described in paragraph (c)(1) of this section, the general exemption provided therein shall no longer be applicable and an ad hoc exemption must be sought in accordance with paragraph (b) of this section.

(d) *Special exemption for special Government employees.* Federal Personnel Manual Chapter 735, Appendix C provides that a special Government employee should in general be disqualified from participating as such in a matter of any type the outcome of which will have a direct and predictable effect upon the financial interests covered by 18 U.S.C. 208. However, that chapter states that the power of exemption may be exercised in this situation "if the special Government employee renders advice of a general nature from which no preference or advantage over others might be gained by any particular person or organization." It is the policy of the Nuclear Regulatory Commission in conformity with the foregoing, to exercise the power of exemption pursuant to 18 U.S.C. 208(b) in such situations. The authority to grant such an exemption is delegated to the NRC official responsible for appointment or designation of the particular consultant or advisor. This exemption is noted on the form NRC-443 by the appointing official for the consultant or advisor concerned, by a statement that the employee "need not be precluded from rendering general advice in situations where no preference or advantage over others might be gained by any particular person or organization."

(e) *Vested pension interests.* Except as permitted by paragraph (b) of this section, no employee shall participate personally and substantially as a Government officer or employee, through decision, approval, disapproval, recommendation, the rendering of advice, investigation, or otherwise, in a judicial or other proceeding, application, request for a ruling or other determination, contract, claim, controversy, charge, accusation, arrest, or other particular matter affecting the financial interest of a company in which the employee holds a vested pension interest. The appropriate agency official under paragraph (b)(6) of this section is not to grant an exemption pursuant to paragraph (b) of this section unless the Office of the General Counsel has reviewed the pension plan and made a determination that the pension interest is not so substantial as to be deemed likely to affect the integrity of the employee's services to the Government, in that as an NRC employee the individual cannot in any fashion influence the amount of the pension.

[31 FR 4502, Mar. 17, 1966, as amended at 44 FR 41424, July 17, 1979; 52 FR 30903, Aug. 18, 1987]

§ 0.735-22 Future employment (based on 18 U.S.C. 208).

(a) Solicitation, negotiation, or arrangements for private employment by an employee who is acting on behalf of the NRC in any particular matter in which the prospective employer has a financial interest are prohibited. With the authorization of his supervisor, an employee may be relieved of any assignment which, in the absence of such relief, might preclude such solicitation, negotiation, or arrangements.

(b) No employee shall undertake to act on behalf of the NRC in any capacity in a matter that to his knowledge affects even indirectly any party outside the Government with whom he is soliciting, negotiating, or has arrangements for future employment, except pursuant to the authorization of the Commission, its designee, or the Executive Director for Operations, as appropriate, after full disclosure. (See § 0.735-21.)

[31 FR 4502, Mar. 17, 1966, as amended at 40 FR 8775, Mar. 3, 1975]

§ 0.735-23 Activities of officers and employees in claims against and other matters affecting the Government (based on 18 U.S.C. 205).

(a) No employee shall otherwise than in the proper discharge of his official duties:

(1) Act as agent or attorney for prosecuting any claim against the United States, or receive any gratuity, or any share of or interest in any such claim in consideration of assistance in the prosecution of such claim, or

(2) Act as agent or attorney for anyone before any department, agency, court, court-martial, officer, or any civil, military, or naval commission in connection with any proceeding, application, request for a ruling or other determination, contract, claim, controversy, charge, accusation, arrest, or other particular matter in which the United States is a party or has a direct and substantial interest.

(b) A special Government employee shall be subject to paragraph (a) of this section only in relation to a particular matter involving a specific party or parties (1) in which he has at any time participated personally and substantially as a Government employee or as a special Government employee through decision, approval, disapproval, recommendation, the rendering of advice, investigation or otherwise, or (2) which is pending in the department or agency of the Government in which he is serving: *Provided*, That paragraph (b)(2) of this section shall not apply in the case of a special Government employee who has served in such department or agency no more than 60 days during the immediately preceding period of 365 consecutive days.

(c) Nothing in paragraph (a) of this section prevents an employee, if not inconsistent with the faithful performance of his duties, from acting without compensation as agent or attorney for any person who is the subject of disciplinary, loyalty, or other personnel administration proceedings in connection with those proceedings.

(d) Nothing in paragraph (a) of this section prevents an employee from acting, with or without compensation, as agent or attorney for his parents, spouse, child, or any person for whom, or for any estate for which, he is serving as guardian, executor, administrator, trustee, or other personal fiduciary except in those matters in which he has participated personally and substantially as a Government employee, through decision, approval, disapproval, recommendation, the rendering of advice, investigation, or otherwise, or which are the subject of his official responsibility, provided that the Commission, its designee, the Executive Director for Operations, or the head of an office or division, as appropriate, approves.

(e)(1) Nothing in paragraph (a) of this section prevents a special Government employee from acting as agent or attorney for another person in the performance of work under a grant by, or a contract with or for the benefit of, the United States when represented by the NRC provided that the Executive Director for Operations shall certify in writing that the national interest so requires. Such certification shall be submitted for publication in the FEDERAL REGISTER.

(2) The special Government employee shall immediately notify the NRC when so designated to act as agent or attorney by his private employer.

(f) Nothing in paragraph (a) of this section prevents an employee from giving testimony under oath or from making statements required to be made under penalty for perjury or contempt.

[31 FR 4502, Mar. 17, 1966, as amended at 40 FR 8775, Mar. 3, 1975]

§ 0.735-24 Receiving salary from source other than the U.S. Government (based on 18 U.S.C. 209).

(a) No employee shall receive any salary, or any contribution to or supplementation of salary, as compensation for his services as an employee of the NRC from any source other than the Government of the United States, except as may be contributed out of the treasury of any State, county, or municipality.

(b) Nothing in paragraph (a) of this section prevents an employee of the NRC from continuing to participate in a bona fide pension, retirement, group life, health or accident insurance, profit sharing, stock bonus, or other employee welfare or benefit plan maintained by a former employer.

(c) Paragraph (a) of this section does not apply to a special Government employee or to an employee of the Government serving without compensation, whether or not he is a special Government employee.

(d) Paragraph (a) of this section does not prohibit acceptance of contributions, awards, or other expenses for training or to attend meetings under the terms of Chapter 41 of Title 5, United States Code. See NRC Appendix 4150.

[31 FR 4502, Mar. 17, 1966, as amended at 32 FR 13651, Sept. 29, 1967]

§ 0.735-25 Compensation to employees in matters affecting the Government (based on 18 U.S.C. 203).

(a) No employee shall, otherwise than as provided by law for the proper discharge of official duties, directly or indirectly receive or agree to receive, or ask, demand, solicit, or seek, any compensation for any services rendered or to be rendered either by himself or another in relation to any proceeding, application, request for a ruling or other determination, contract, claim, controversy, charge, accusation, arrest, or other particular matter in which the United States is a party or has a direct and substantial interest, before any department, agency, court-martial, officer, or any civil, military, or naval commission.

(b) A special Government employee shall be subject to paragraph (a) of this section only in relation to a particular matter involving a specific party or parties (1) in which he has at any time participated personally and substantially as a Government employee or as a special Government employee through decision, approval, disapproval, recommendation, the rendering of advice, investigation, or otherwise, or (2) which is pending in the department or agency of the Government in which he is serving: *Provided*, That paragraph (b)(2) of this section shall not apply in the case of a special Government employee who has served in such department or agency no more than 60 days during the immediately preceding period of 365 consecutive days.

§ 0.735-26 Disqualification of former officers and employees in matters connected with former duties or official responsibilities; disqualification of partners of current officers and employees (based on 18 U.S.C. 207).

(a) No employee, after terminating NRC employment, shall knowingly act as agent or attorney for, or otherwise represent, any other person (except the United States) in any formal or informal appearance before, or, with the intent to influence, make any oral or written communication on behalf of any other person (except the United States) to:

(1) Any department, agency, court, courtmartial, or any civil, military or naval commission of the United States or the District of Columbia, or any officer or employee thereof, and

(2) In connection with any judicial or other proceeding, application, request for a ruling or other determination, contract, claim, controversy, investigation, charge, accusation, arrest, or other particular matter involving a specific party or parties in which the United States or the District of Columbia is a party or has a direct and substantial interest, and

(3) In which the individual participated personally and substantially as an employee through decision, approval, disapproval, recommendation, the rendering of advice, investigation or otherwise, while so employed.

(b)(1) No employee shall, within two years after terminating NRC employment, knowingly act as agent or attorney for, or otherwise represent, any other person (except the United States), in any formal or informal appearance before, or, with the intent to influence, make any oral or written communication on behalf of any other person (except the United States) to:

(i) Any department, agency, court, courtmartial, or any civil, military or naval commission of the United States or the District of Columbia, or any officer or employer thereof, and

(ii) In connection with any judicial or other proceeding, application, request for a ruling or other determination, contract, claim, controversy, investigation, charge, accusation, arrest or other particular matter involving a specific party or parties in which the United States or the District of Columbia is a party or has a direct and substantial interest, and

(iii) Which was actually pending under the individual's official responsibility as an employee within a period of one year prior to the termination of such responsibility.

(2) No employee shall, within two years after terminating NRC employment, as specified in paragraph (d) of this section, knowingly represent, or aid, counsel, advise counsel or assist in representing any other person (except the United States) by personal presence at any formal or informal appearance before:

(i) Any department, agency, court, courtmartial, or any civil, military or naval commission of the United States or the District of Columbia, or any officer or employer thereof, and

(ii) In connection with any judicial or other proceeding, application, request for a ruling or other determination, contract, claim, controversy, investigation, charge, accusation, arrest or other particular matter involving a specific party or parties in which the United States or the District of Columbia is a party or has a direct and substantial interest, and

(iii) In which the individual participated personally and substantially as an employee.

(c) No employee, other than a special Government employee who serves for less than sixty days in a given calendar year, having been employed as specified in paragraph (d) of this section, shall, within one year after termination of NRC employment, knowingly act as agent or attorney for, or otherwise represent, anyone other than the United States in any formal or informal appearance before, or, with the intent to influence, make any oral or written communication on behalf of anyone other than the United States, to:

(1) The Nuclear Regulatory Commission, and

(2) In connection with any judicial, rulemaking, or other proceeding, application, request for a ruling or other determination, contract, claim, controversy, investigation, charge, accusation, arrest, or other particular matter, and

(3) Which is pending before the Commission or in which the Commission has a direct and substantial interest.

(d)(1) Paragraph (c) of this section applies to a person employed:

(i) At a rate of pay specified in or fixed according to Subchapter II of

Chapter 53 of Title 5, United States Code, or a comparable or greater rate of pay under other authority, or

(ii) In a position which involves significant decision-making or supervisory responsibility, as designated by the Director of the Office of Government Ethics, in consultation with the Commission. Only positions for which the basic rate of pay for GG-17 of the General Schedule prescribed by section 5332 of Title 5, United States Code, or positions which are established within the Senior Executive Service pursuant to the Civil Service Reform Act of 1978 may be designated.

(2) The prohibition of paragraph (c) of this section shall not apply to appearances, communications, or representation by a former employee, who is:

(i) An elected official of a State or local government, or

(ii) Whose principal occupation or employment is with (A) an agency or instrumentality of a State or local government, (B) an accredited, degree-granting institution of higher education, as defined in section 1201(a) of the Higher Education Act of 1965, or (C) a hospital or medical research organization, exempted and defined under section 501(c)(3) of the Internal Revenue Code of 1954, and the appearance, communication, or representation is on behalf of such government, institution, hospital, or organization.

(e) The prohibitions of paragraphs (a), (b), and (c) of this section shall not apply—

(1) With respect to the making of communications solely for the purpose of furnishing scientific or technological information if the following procedures are observed:

(i) The former employee proposing to make the communication solely for the purpose of furnishing scientific or technological information receives prior written authorization from the Executive Director for Operations. The individual shall provide to the Executive Director for Operations a written statement that indicates he or she is a former employee subject to post-employment restrictions under this section, that briefly summarizes the content of the proposed communication, that describes his or her involvement, if any, as an NRC employee on the matter to be discussed, and that certifies the communication he or she desires to make is solely for the purpose of furnishing scientific or technological information; and

(ii) The Executive Director for Operations before deciding whether to authorize the communication shall consult with the counselor or deputy counselor. The primary factor to be considered by the Executive Director for Operations is whether receipt of the scientific or technological information would further the agency's mission.

(2) If the Commission, in consultation with the Director of the Office of Government Ethics, makes a certification published in the FEDERAL REGISTER that the former employee has outstanding qualifications in a scientific, technological, or other technical discipline, and is acting with respect to a particular matter which requires such qualifications, and that the national interest would be served by the participation of the former officer or employee. The Commission under this provision may authorize communications that are not limited to transmission of scientific or technological information.

(f) A partner of an NRC employee, including a special government employee, shall not act as agent or attorney for anyone other than the United States before any department, agency, court, court-martial, or any civil, military, or naval commission of the United States or the District of Columbia, or any officer or employee thereof, in connection with any judicial or other proceeding, application, request for a ruling or other determination, contract, claim, controversy, investigation, charge, accusation, arrest, or other particular matter in which the United States or District of Columbia is a party or has a direct and substantial interest, and in which such employee participates or has participated personally and substantially as an employee through decision, approval, disapproval, recommendation, the rendering of advice, investigation, or otherwise, or which is the subject of his official responsibility.

(g) Nothing in this section shall prevent a former employee from giving testimony under oath, or from making statements required to be made under penalty of perjury.

(h) The prohibition contained in paragraph (c) of this section shall not apply to appearances or communications by a former employee concerning matters of a personal and individual nature, such as personal income taxes or pension benefits; nor shall the prohibition of that subsection prevent a former employee from making or providing a statement, which is based on the former employee's own special knowledge in the particular area that is the subject of the statement, provided that no compenstion is thereby received, other than that regularly provided for by law or regulation for witnesses.

(i) If the Commission finds, after notice and opportunity for a hearing, that the former employee violated paragraph (a), (b), or (c) of this section, the Commission may prohibit that person from making on behalf of any other person (except the United States), any informal or formal appearance before, or, with the intent to influence, any oral or written communication to, the Commission on a pending matter of business for a period not to exceed five years, or may take other appropriate disciplinary action. Such disciplinary action shall be subject to review in an appropriate United States district court. The Commission's procedures for implementing this subsection are contained in NRC Manual Chapter 4124.

(j) The Office of Personnel Management has promulgated detailed regulations explaining and interpreting the post-employment regulations set forth in this section. See 5 CFR Part 737.

[46 FR 51716, Oct. 22, 1981, as amended at 50 FR 25698, June 21, 1985]

§ 0.735-27 Appearances by former employees before NRC.

When a former employee proposes to act as agent or attorney before an NRC office on behalf of anyone other than the United States in connection with any of the matters cited in § 0.735-26, he is expected to make known to the appropriate official of the NRC office the fact of his former assignment with NRC. The head of the office or division or employee before whom the former employee appears, before transacting business with the former employee or authorizing employees under his jurisdiction to transact any business with the former employee, shall call the former employee's attention to the restrictions and penalties contained in 18 U.S.C. 207. No NRC official or employee, except the General Counsel, shall offer to the former employee an interpretation of 18 U.S.C. 207 as applied to the situation at hand.

§ 0.735-28 Confidential statements of employment and financial interests.

(a) *Categories of employees required to submit statements.* The following employees shall submit confidential statements of employment and financial interest prepared in accordance with paragraph (c) of this section. These employees have duties and responsibilities which require the incumbent to report employment and financial interests in order to avoid involvement in a possible conflicts of interest situation, to protect the integrity of the government, and to carry out the purposes of the Federal laws, executive orders and regulations pertaining to conflicts of interest.

(1) All employees paid at the levels of GG-13, GG-14, or GG-15.

(2) All contracting officers in the Office of Administration, and all attorneys in the Office of the General Counsel (including those employees being paid below the GG-13 level).

(3) All special Government employees except those who have worked 60 days or more in the previous calendar year and were paid during that period at a level of GG-16 or above, or an equivalent thereto.

(b) *Notice of employees of time and place to submit statements.* Upon commencing NRC employment, the Office of Personnel will provide all employees covered by the reporting requirement with a copy of the statement form. Each employee covered by the reporting requirement shall submit his statement to the head of his office not later than 30 days after his entrance on duty. Statements of special Government employees shall be submitted prior to appointment. Each regular and special Government employee covered by the reporting requirement shall submit to the head of his office a supplementary annual statement by May 15 of each year. The information provided in this annual supplement should reflect the individual's interests as of April 30. Notwithstanding the filing of the report(s) required by this section, each employee shall at all times avoid acquiring a financial interest that could result, or taking an action that would result, in a violation of the conflicts-of-interest provisions of section 208 of Title 18, United States Code, or this Part 0.

(c) *Preparation of statement.* Statements shall be prepared in accordance with the following:

(1) *Statement Form.* The forms prescribed by NRC are:

Regular Government employees—Form NRC 269.
Special Government employees—Form NRC 443.

(2) *Statement content*—(i) *Interests of employee's relatives.* The interest of a spouse, minor child, or other member of an employee's immediate household is considered to be an interest of the employee and must be reported. For the purpose of this paragraph, "member of an employee's immediate household" means full-time residents of the employee's household.

(ii) *Information not known by employees.* If any information required to be included on the statement or supplementary statement, including holdings placed in trust, is not known to the employee but is known to another person, the employee shall request that other person to submit information on his behalf, and shall report such request in Part IV of Form NRC 269 or item 16b. of Form NRC 443.

(iii) *Information not required to be submitted.* A statement or supplementary statement need not contain the following:

(A) Any information relating to the employee's connection with, or interest in, a professional society or a charitable, religious, social, fraternal, recreational, public service, civic, or political organization or a similar organization not conducted as a business enterprise and which is not engaged in the ownership or conduct of a business enterprise. For the purpose of this section, educational and other institutions doing research and development or related work involving grants of money from or contracts with the Government are deemed "business enterprises" and are required to be included in an employee's statement.

(B) Precise amounts of financial interests, indebtedness, or value of real property. The employee may, however, at a later time be required to reveal precise amounts if the NRC needs that information in order to carry out its responsibilities under applicable laws and regulations.

(C) Remote or inconsequential financial interests, as set forth in § 0.735-21(c).

(D) For special Government employees: Those financial interests which are determined by the official responsible for such employee's appointment as not to be related either directly or indirectly to the duties and responsibilities of said employee.

(d) *Reviewing statements and reporting conflicts of interest.* (1) The employee shall prepare the statement in duplicate, retain one copy, and submit one copy to the head of his office.

(2) The office head, in reviewing the statement, shall assess it for conflicts or the appearance of conflicts of interest in the context of the employee's assigned duties and responsibilities in the NRC.

(3) If the office head desires advice and guidance, he may discuss the statement with the counselor or appropriate deputy counselor.

(4) The office head shall discuss with the employee and point out any aspects of the statement which give rise, in the office head's opinion, to questions of conflict or of appearance of conflict. (The office head shall not take, or direct the employee to take, any action with respect to such conflict without first seeking the advice of the counselor or appropriate deputy counselor.)

(5) The office head shall in all cases record his opinion as to the presence or absence of a conflict on the state-

ment and forward same to the NRC counselor or deputy counselor.

(6) The NRC counselor or deputy counselor shall review the statement, and discuss any questions with the employee and/or his respective office head.

(7) If the NRC counselor or deputy counselor believes that the statement evidences no question of conflict of interest, he shall record his opinion on the statement, and notify the office head.

(8) If the NRC counselor or deputy counselor believes there is a question of conflict of interest, he shall return the statement to the office head with his opinion recorded thereon. (The counselor or deputy counselor shall make his services available to the office head and employee involved to assist in effecting a resolution of any conflict or appearance of conflict.) The reviewer shall report to the counselor or deputy counselor the results of endeavors to effect resolution of the conflict at the employee-office head level, which results shall be recorded on the employee's statement and submitted to the counselor or deputy counselor for review and approval.

(9) When a statement submitted or information from other sources indicates a conflict between the interests of an employee and the performance of his service for the NRC and when the conflict or appearance of conflict is not resolved by the head of the employee's office, or the counselor or deputy counselor, the information concerning the conflict or appearance of conflict shall be reported to the Commission, or the Executive Director for Operations, as appropriate. The employee concerned shall be provided an opportunity to explain the conflict or appearance of conflict.

(10) When, after consideration of the explanation of the employee provided for in paragraph (d)(9) of this section, the Commission, or the Executive Director for Operations, as appropriate, decides that remedial action is required, immediate action to end the conflict or appearance of conflict of interest shall be taken. Remedial action may include, but is not limited to:

(i) Changes in assigned duties;

(ii) Divestment by the employee of his conflicting interest;

(iii) Disciplinary action; or

(iv) Disqualification for a particular assignment.

Remedial action, whether disciplinary or otherwise, shall be effected in accordance with any applicable laws, Executive Orders, and regulations. Disciplinary remedial action with respect to an employee of another Government agency assigned or detailed to the NRC shall be effected only by the parent agency.

(11) Upon completion of processing, the statement shall be filed in the office of the counselor or deputy counselor, in a special file maintained for that purpose. An NRC office may request a copy of a statement from the counselor or deputy counselor: *Provided*, That it is required for purposes of carrying out responsibilities under this part.

(12) The required supplementary statements shall be processed in the same manner as an initial statement.

(e) *Confidentiality of employees' statements.* NRC shall hold each statement of employment and financial interests, and each supplementary statement, in confidence. To insure this confidentiality only the NRC counselor, deputy counselor(s), and those office heads to whom reports are to be submitted (including those employees specifically designated by them to assist in the review as may be necessary) are authorized to review the statements as provided in this section. The foregoing employees are responsible for maintaining the statements in confidence and shall not allow access to, or allow information to be disclosed from, a statement except to carry out the purpose of this part. NRC shall not disclose information from a statement except in accordance with procedures set forth in paragraph (d) of this section, or as the Commission, or the Executive Director for Operations, as appropriate, or the Office of Personnel Management shall determine for good cause shown.

(f) *Effect of employee's statements on other requirements.* The statements of employment and financial interests and supplementary statements required of employees are in addition to, and not in substitution for, or in derogation of, any similar requirement imposed by law, order, or regulation. The submission of a statement or supplementary statement by an employee or the absence of any requirement that an employee submit such a statement does not permit him or any other person to participate in a matter in which his or the other person's participation is prohibited by law, order, or regulation.

(g) *Availability of review.* Any employee who believes that his position has been improperly included under this section as one requiring the submission of a statement of employment and financial interests may submit a grievance. A non-bargaining unit employee must use the grievance procedure in NRC Manual Chapter 4157 for review of the complaint. A bargaining unit employee must use the grievance procedure negotiated with the National Treasury Employees Union.

[45 FR 26022, Apr. 17, 1980, as amended at 46 FR 51717, Oct. 22, 1981; 51 FR 35997, Oct. 8, 1986; 52 FR 31608, Aug. 21, 1987; 54 FR 53313, Dec. 28, 1989]

§ 0.735–28a Financial disclosure reports under the Ethics in Government Act.

Commissioners, employees and special government employees paid at or above the grade 16 level, and employees whose positions are excepted from the regular competitive appointment process by reason of being of a confidential or policymaking character (unless otherwise excluded by the Office of Government Ethics) shall file public financial disclosure reports (SF 278) in accordance with the requirements of the Ethics in Government Act and regulations of the Office of Government Ethics, 5 CFR Part 734. The employees shall submit their completed forms to the Office of the General Counsel for review. The General Counsel's office shall place the form in the Commission's Public Document Room.

[50 FR 25698, June 21, 1985]

§ 0.735–29 Restriction against ownership of certain security interests by Commissioners, certain staff members and other related personnel.

(a) No Commissioner or employee, including special Government employees who are members of the Advisory Committee on Reactor Safeguards, the Advisory Committee on Nuclear Waste, the Atomic Safety and Licensing Board Panel, or the Atomic Safety and Licensing Appeal Panel, who occupies a position at or above GS-13 or its equivalent, shall own any stocks, bonds, or other security interests issued by any entity falling within the categories set forth in paragraph (b)(1) of this section. This prohibition also applies to employees who occupy positions below the GS-13 level that fall within occupational codes designated by the Commission. The restrictions set forth in this section apply to spouse, minor child, or other members of the immediate household of a Commissioner, employee, or special Government employee. In cases where the entity covered by the prohibition is a subsidiary of another corporation, the prohibition extends to the parent company.

(b) The Commission will publish at least once each year a list of stocks, bonds, and other security interests which employees covered by this section may not own.

(1) These are stocks, bonds, or other security interests issued by:

(i) Publicly or privately owned utilities which have filed an application with the Commission requesting an early site review, or seeking authorization to construct or operate a facility for the generation of electric energy by means of a nuclear reactor and those utilities which have received a construction permit or an operating license from the Commission that is currently effective.

(ii) State or local governments, if the primary purpose of the security is to finance the construction or operation of a nuclear reactor.

(iii) Companies manufacturing or selling nuclear power or test reactors.

(iv) Architectural-engineering companies that have been engaged to provide services relating to a nuclear facility by an applicant for a construction permit or an applicant for an operating license, and architectural-engineering companies which have filed a standard reference design that is under Commission review or has been approved by the Commission and is currently effective.

(v) Companies licensed by the Commission to mill, convert, enrich, fabricate, store, or dispose of source or special nuclear material, or applicants for such licenses, that are designated by the Executive Director for Operations, after consultation with the Office of the General Counsel, because they are or will be substantially engaged in such nuclear fuel cycle or disposal activities.

(2)(i) An individual covered by this section who owns securities described in paragraph (a)(1) of this section shall dispose of them no later than 365 days after the entities first appear on the list described in paragraph (a) of this section. Notwithstanding the provisions of § 0.735-21(c), no employee may participate personally and substantially in a particular matter affecting any entity that appears on the list as long as the employee or his spouse, minor child, or other members of his immediate household owns the security interest.

(ii) An individual newly employed by NRC who is covered by this section shall dispose of any securities described in paragraph (a)(1) of this section that the employee may own no later than 30 days after his entrance on duty and within the same period shall ensure and sign a certification that neither the employee nor any individual who is covered by this section through relationship with him owns any securities described in that paragraph.

(c) Each individual employed by NRC who is covered by this section shall each year sign either: (1) A certification that neither he nor any individual covered by this section through relationship with him owns any securities described in paragraph (a)(1) of this section or, if he or any such individual in fact owns securities therein described, (2) a certification identifying them, disclosing how and when they were acquired and stating approximately when they will be disposed of.

(d) Securities described in paragraph (b)(1) of this section that are acquired by an individual who is covered by this section through gift, inheritance or other similar involuntary manner shall be disposed of within a reasonable time.

(e) The Commission may exempt an employee from the restrictions of this section where divestiture of the stock, bond, or other security interest is determined to be inequitable by the Commission.

[44 FR 41424, July 17, 1979, as amended at 50 FR 25698, June 21, 1985; 52 FR 11028, Apr. 7, 1987; 53 FR 35303, Sept. 13, 1988]

Subpart C—Other Restrictions Imposed by Statute on Conduct of Employees

§ 0.735-30 Description of statutory provisions.

Each employee has a positive duty to acquaint himself with each statute that relates to his ethical and other conduct as an employee of the NRC and of the Government. Certain of these statutes are referred to in §§ 0.735-21—0.735-27. Attention of employees is also directed to the following statutory provisions:

(a) The prohibitions contained in the following sections of the Atomic Energy Act of 1954, as amended: Section 222, "Violation of Specific Sections"; Section 223, "Violation of Sections Generally"; Section 224, "Communication of Restricted Data"; Section 225, "Receipt of Restricted Data"; Section 226, "Tampering With Restricted Data"; and Section 227, "Disclosure of Restricted Data" (42 U.S.C. 2272 through 2277).

(b) The prohibitions against the disclosure of classified information (18 U.S.C. 798, 50 U.S.C. 783).

(c) The prohibition against the disclosure of confidential information (18 U.S.C. 1905).

(d) The prohibition against the employment of a member of a Communist organization (50 U.S.C. 784).

(e) The prohibition against lobbying with appropriated funds (18 U.S.C. 1913).

(f) The prohibition against proscribed political activities in Subchapter III of Chapter 73 of Title 5, U.S. Code and 18 U.S.C. 602, 603, 607, and 608. (See NRC Manual Chapter 4122, "Political Activity.")

(g) The prohibition against bribery of public officials and witnesses (18 U.S.C. 201).

(h) The prohibition against acceptance or solicitation to obtain appointive public office (18 U.S.C. 211).

(i) The prohibitions against disloyalty and striking (5 U.S.C. 7311, 18 U.S.C. 1918). (See also NRC Manual Chapter 4121, "Oath of Office" and NRC Manual Chapter 4166, "Labor-Management Relations Program for Federal Employees.")

(j) The provision relating to the habitual use of intoxicants to excess (5 U.S.C. 7352).

(k) The prohibition against the misuse of a Government vehicle (31 U.S.C. 638a(c)).

(l) The prohibition against the misuse of the franking privilege (18 U.S.C. 1719).

(m) The prohibition against the use of deceit in an examination or personnel action in connection with Government employment (18 U.S.C. 1917).

(n) The prohibition against fraud or false statements in a Government matter (18 U.S.C. 1001).

(o) The prohibition against mutilating or destroying a public record (18 U.S.C. 2071). (See also NRC Appendix 0230, "Records Disposition.")

(p) The prohibition against counterfeiting and forging transportation requests (18 U.S.C. 508).

(q) The prohibition against embezzlement of Government money or property (18 U.S.C. 641). (See also NRC Manual Chapter 5201, "Personal Property Management.")

(r) The prohibition against failing to account for public money (18 U.S.C. 643).

(s) The prohibition against an employee's private use of public money (18 U.S.C. 653).

(t) The prohibition against embezzlement of the money or property of another person in the possession of an employee by reason of his employment (18 U.S.C. 654).

(u) The prohibition against unauthorized use of documents relating to claims from or by the Government (18 U.S.C. 285).

(v) The prohibition against making false entries in official records with intent to defraud or making false reports concerning moneys and securities with such intent (18 U.S.C. 2073).

(w) The prohibition against an employee acting as the agent of a foreign principal registered under the Foreign Agents Registration Act (18 U.S.C. 219).

(x) The Code of Ethics for Government Service (5 U.S.C. 7301).

[32 FR 13652, Sept. 29, 1967, as amended at 40 FR 50704, Oct. 31, 1975; 46 FR 51717, Oct. 22, 1981]

Subpart D—Restrictions Imposed by NRC Administrative Decision on Conduct of Employees

§ 0.735-40 Outside employment and other outside activity.

(a) There is no general prohibition against employees engaging in outside employment or other outside activity; except that no employment or activity may be undertaken which is not compatible with the full and proper discharge of the duties and responsibilities of the employee's Government employment. Incompatible activities include but are not limited to:

(1) Acceptance of a fee, compensation, gift, payment of expense, or any other thing of monetary value in circumstances in which acceptance may result in, or create the appearance of, conflicts of interests; or

(2) Acceptance of any employment, fee, compensation, or payment of expense, from (i) A Commission licensee; (ii) an applicant for Commission license; (iii) an organization directly engaged in activities in the commercial nuclear field; (iv) a Commission contractor; (v) a Commission supplier; (vi) holder of a license issued by a State pursuant to an agreement between the Commission and the State; (vii) a trade association which represents clients concerning nuclear matters; or (viii) a law firm or other organization which is participating in an NRC proceeding or which regularly represents

itself or clients before the NRC, unless written authorization is received pursuant to § 0.735-40(b). Ordinarily, an employee will be authorized to serve as an instructor at an academic institution which holds a Commission license, or to engage in other proposed activities of a similar character; or

(3) Outside employment which tends to impair his mental or physical capacity to perform his Government duties and responsibilities in an acceptable manner.

(b) In any case in which there is a question as to the propriety of outside employment in which an employee proposes to engage, or where prior written authorization is required pursuant to § 0.735-40(a)(2), the employee's office or division head shall prepare and transmit the following information to the appropriate individual(s) specified in paragraph (f) of this section: (1) Name and job title of the employee involved; (2) a brief summary of the employee's official NRC duties; (3) a brief description of the proposed employment or outside activity, including the compensation to be received; (4) the name and nature of the business of the employing individual or organization; (5) his views whether the outside employment or activity should be authorized.

(c) An employee shall not receive any salary or anything of monetary value from a private source as compensation for his services to the Government (18 U.S.C. 209).

(d) Employees are encouraged to engage in teaching, lecturing, and writing that is not prohibited by law, Executive Order 11222, Office of Personnel Management regulations, or the regulations in this part. However, an employee shall not, either for or without compensation, engage in teaching, lecturing, or writing, including teaching, lecturing, or writing for the purpose of the special preparation of a person or class of persons for an examination of the Office of Personnel Management or Board of Examiners for the Foreign Service, that is dependent on information obtained as a result of his Government employment, except when that information has been made available to the general public or will be made available on request, or when the Executive Director for Operations has given written authorization for the use of nonpublic information on the basis that the use is in the public interest.

(e) Except as allowed for training or to attend meetings under section 4111 of title 5, U.S. Code, and Executive Order 10800, no employee shall accept a fee from an outside source on account of a public appearance, a speech, or lecture, if the public appearance or the preparation or delivery of the speech or lecture was a part of the official duties of the employee, if the public appearance, the speech, or the lecture was made during official working hours, or if travel for the purpose of the public appearance, speech, or lecture was made at Government expense. In addition, no employee shall accept a fee for the preparation, publication, or review of an article, story, or book if it was prepared during official working hours and/or was a part of the official duties of the employee.

(f) Employees of offices reporting to the Commission through the Executive Director for Operations must receive the written authorization of the Executive Director for Operations before engaging in activities covered by paragraphs (a)(2) and (b) of this section. The Executive Director for Operations before making his decision shall consult with the head of the employee's office or division and with the counselor or deputy counselor. Employees of boards, panels, and offices reporting directly to the Commission must receive the written authorization of the head of their office before engaging in activities covered by paragraphs (a)(2) and (b) of this section. The head of the employee's office before making his decision shall consult with the counselor or deputy counselor.

(g) Bona fide reimbursements for expenses of travel and such other necessary subsistence may be accepted if (1) It is not prohibited by paragraph (a) of this section, (2) if reimbursement from the government is not received; and (3) it is not proscribed by Decision B-128527 of the Comptroller General dated March 7, 1967, or otherwise prohibited by law. Questions concerning application of the Comptroller General's decision should be referred to the counselor. However, this paragraph does not allow an employee to be reimbursed, or payment to be made on his behalf, for excessive personal living expenses, gifts, entertainment, or other personal benefits.

(h) An employee is not precluded by this section or § 0.735-42 from:

(1) Participation in the affairs of or acceptance of an award for a meritorious public contribution or achievement given by a charitable, religious, professional, social, fraternal, nonprofit educational, recreational, public service, or civic organization.

[31 FR 4502, Mar. 17, 1966, as amended at 32 FR 13652, Sept. 29, 1967; 33 FR 11396, Aug. 10, 1968; 40 FR 8776, Mar. 3, 1975; 40 FR 50704, Oct. 31, 1975; 42 FR 38893, Aug. 1, 1977; 46 FR 51717, Oct. 22, 1981]

§ 0.735–41 Misuse of information.

For the purpose of furthering a private interest, an employee shall not, except as provided in § 0.735-40(d), directly or indirectly use, or allow the use of, official information obtained through or in connection with his Government employment which has not been made available to the general public. See also section 68a of the Atomic Energy Act of 1954, 42 U.S.C., section 2098(a), "Public and acquired lands," which provides as follows:

> a. No individual, corporation, partnership, or association, which had any part, directly or indirectly, in the development of the atomic energy program, may benefit by any location, entry, or settlement upon the public domain made after such individual, corporation, partnership, or association took part in such project, if such individual, corporation, partnership, or association, by reason of having had such part in the development of the atomic energy program, acquired confidential official information as to the existence of deposits of uranium, thorium, or other materials in the specific lands upon which such location, entry, or settlement is made, and subsequent to August 30, 1954, made such location, entry, or settlement, or caused the same to be made for his, or its, or their benefit.

§ 0.735–42 Gifts, entertainment, and favors.

(a) Except as provided in paragraph (b) or (e) of this section, an employee should not solicit or accept, directly or indirectly, any gift, gratuity, favor, entertainment, loan, or any other thing of monetary value, from a person who:

(1) Has, or is seeking to obtain, contractual or other business or financial relations with NRC;

(2) Conducts operations or activities that are regulated by NRC or is an applicant for a license from NRC; or

(3) Has interests that may be substantially affected by the performance or nonperformance of his official duty.

(b) The following exceptions are authorized as being necessary and appropriate in view of the nature of the NRC's work and the duties and responsibilities of its employees:

(1) When the circumstances make it clear that it is obvious family or personal relationships (such as those between the parents, children, or spouse of the employee and the employee) rather than the business of the persons concerned which are the motivating factors;

(2) Acceptance of food and refreshments of nominal value on infrequent occasions in the ordinary course of a luncheon or dinner meeting or other meeting or on an inspection tour where an employee may properly be in attendance;

(3) Acceptance of loans from banks or other financial institutions on customary terms to finance proper and usual activities of employees, such as home mortgage loans;

(4) Acceptance of unsolicited advertising or promotional material, such as pens, pencils, note pads, calendars and other items of nominal intrinsic value; and

(5) Acceptance of transportation not inconsistent with the provisions of paragraph (c) of this section.

(6) Acceptance of food, lodging, and transportation from a prospective employer incident to travel required for a bona fide job interview if—

(i) The employee, in conformance with § 0.735-22, is not acting on behalf of the NRC in any particular matter in which the prospective employer has a financial interest;

(ii) Any reimbursement for food, lodging, and transportation is limited to actual expenses; and

(iii) The employee informs the counselor or a deputy counselor in writing in advance of the proposed travel.

(7) Acceptance of food and refreshments from a consumer, environmental, industrial, technical, trade, or professional association or similar group (not from an individual company), in connection with an NRC employee's attendance at a widely-attended gathering of mutual interest to the government and the private sector, such as a reception, seminar, conference, or training session, provided that:

(i) The food and refreshments proffered are not excessive; and

(ii) The employee's immediate supervisor or, in the case of an invitation to a Commissioner, the Commissioner, after consultation with the counselor or a deputy counselor, has determined in writing that:

(A) It is in the interest of the NRC for the employee to attend the gathering; and

(B) Attendance at the event will not create an appearance of impropriety, considering factors such as the timing of the event, the reasons for the event, and the sponsors of the event.

(c) No employee shall accept free transportation in motor vehicles, aircraft, or other means, for official or unofficial purposes from NRC contractors, prospective contractors, licensees or prospective licensees, or representatives of any of them when such transportation might reasonably be interpreted as seeking to influence the impartiality of the employee or the agency.

(d) An employee shall not solicit a contribution from another employee for a gift to an official superior, make a donation to an official superior, or accept a gift from an employee receiving less pay than himself (5 U.S.C. 7351), nor shall an employee directly or indirectly solicit from, accept from, offer to, or grant to an official superior or subordinate employee a loan of more than a nominal amount. However, this paragraph does not prohibit: (1) A voluntary gift of nominal value or donation in a nominal amount made on a special occasion such as marriage, illness, or retirement, or (2) a loan as described above of more than a nominal amount where a special personal or business relationship is involved, with prior approval of the higher-ranking employee's supervisor, after consultation with the counselor for NRC, or a deputy counselor, as provided in § 0.735-3(h). A copy of such approval shall be filed as provided for in § 0.735-28(e)(11).

(e) An employee shall not accept a gift, present, decoration, or other thing from a foreign government unless authorized by Congress as provided by the Constitution and in Pub. L. 95-105, 91 Stat. 862.

[31 FR 4502, Mar. 17, 1966, as amended at 32 FR 13653, Sept. 29, 1967; 38 FR 1271, Jan. 11, 1973; 43 FR 1929, Jan. 13, 1978; 50 FR 25698, June 21, 1985; 53 FR 35303, Sept. 13, 1988]

§ 0.735-43 Use of Government property.

An employee shall not directly or indirectly use, or allow the use of, Government property of any kind, including property leased to the Government, for other than officially approved activities. An employee has a positive duty to protect and conserve Government property, including equipment, supplies, and other property entrusted or issued to him.

§ 0.735-44 Scandalous conduct.

No employee shall engage in criminal, infamous, dishonest, immoral, or notoriously disgraceful conduct or other conduct prejudicial to the Government.

§ 0.735-45 Employee indebtedness.

Except as provided in § 0.735-42(d), the NRC considers the credit affairs of its employees essentially their own concern. However, employees are expected to conduct their credit affairs in a manner which does not reflect adversely on the Government as their employer. The NRC will not be placed in the position of acting as a collection agency for private debts or of determining the validity or amount of contested debts to private concerns. An employee is expected to pay each just financial obligation in a proper and timely manner, especially one imposed by law such as Federal, State, or local taxes. Failure on the part of an employee without good reason to honor just financial obligations or to make or adhere to satisfactory arrangements for settlement may be cause for disciplinary action. For the purpose of this section, a "just financial obligation" means one acknowledged by the employee or reduced to judgment by a court, and "in a proper and timely manner" means in a manner which NRC determines does not, under the circumstances, reflect adversely on the Government as the individual's employer.

[46 FR 51717, Oct. 22, 1981]

§ 0.735–46 Gambling, betting, and lotteries.

An employee shall not participate, while on Government-owned or -leased property or while on duty for the Government, in any gambling activity including the operation of a gambling device, in conducting a lottery or pool, in a game for money or property, or in selling or purchasing a numbers slip or ticket. However, this section does not preclude activities:

(a) Necessitated by an employee's law enforcement duties; or

(b) Under section 3 of Executive Order 10927 and similar agency-approved activities.

§ 0.735–47 Handling of funds entrusted by fellow employees.

No employee shall receive, retain, or disburse funds entrusted to him by fellow employees, e.g., credit union deposits or donations to charitable organizations, except with the utmost care in the safeguarding of such funds and the maintenance of full and complete records with regard to the receipt, custody, and disbursement of such funds. Such records shall be made available to appropriate authorities upon proper request.

§ 0.735–48 Restricted communications.

Certain employee communications are prohibited in formal adjudicatory proceedings under §§ 2.780 and 2.781 of this chapter.

[53 FR 10365, Mar. 31, 1988]

§ 0.735–49 Employment of persons on extended leave of absence from a previous employer with reemployment rights or other benefits with the previous employer.

(a) NRC may employ persons on extended leave of absence from private employers where it is the way most advantageous to the NRC to obtain qualified employees with needed skills and no violation of conflict of interest statutes would be involved. The necessity for continued employment of such persons shall be reviewed annually by the Director, Office of Personnel. In their NRC assignments, such employees shall not be permitted to handle, directly or indirectly, or have access to, business confidential data of their former employers' competitors.

(b) When it is proposed to employ such a person, a statement of the exact terms and conditions of the leave of absence from his employer will be obtained from the prospective employee and submitted to the General Counsel for a prior determination of possible violation of statute.

(c) The following quotation from 18 U.S.C. 209 is pertinent to this situation.

> (b) Nothing herein prevents an officer or employee of the executive branch of the U.S. Government, or of any independent agency of the United States, or of the District of Columbia, from continuing to participate in a bona fide pension, retirement, group life, health or accident insurance, profit-sharing, stock bonus, or other employee welfare or benefit plan maintained by a former employer.

[31 FR 4502, Mar. 17, 1966, as amended at 52 FR 31608, Aug. 21, 1987]

§ 0.735–49a Other proscribed actions.

An employee shall avoid any action, whether or not specifically prohibited by this Part 0, which might result in, or create the appearance of:

(a) Using a public office for private gain;

(b) Giving preferential treatment to any person;

(c) Impeding Government efficiency or economy;

(d) Losing complete independence or impartiality;

(e) Making a Government decision outside official channels; or

(f) Affecting adversely the confidence of the public in the integrity of the Government.

[32 FR 13653, Sept. 29, 1967]

Subpart E—Ethical and Other Conduct and Responsibilities of Special Government Employees

§ 0.735-50 Use of Government employment.

A special Government employee shall not use his Government employment for a purpose that is, or gives the appearance of being, motivated by the desire for private gain for himself or another person, particularly one with whom he has family, business, or financial ties.

§ 0.735-51 Use of inside information.

(a) A special Government employee shall not use inside information obtained as a result of his Government employment for private gain for himself or another person either by direct action on his part or by counsel, recommendation, or suggestion to another person, particularly one with whom he has family, business, or financial ties. For the purpose of this section, "inside information" means information obtained under Government authority which has not become part of the body of public information.

(b) Special Government employees may teach, lecture, or write in a manner not inconsistent with § 0.735-40(d), in regard to employees.

§ 0.735-52 Coercion.

A special Government employee shall not use his Government employment to coerce, or give the appearance of coercing, a person to provide financial benefit to himself or another person, particularly one with whom he has family, business, or financial ties.

§ 0.735-53 Gifts, entertainment, and favors.

(a) Except as provided in paragraph (b) of this section, a special Government employee, while so employed or in connection with his employment, shall not receive or solicit from a person having business with NRC anything of value as a gift, gratuity, loan, entertainment, or favor for himself or another person, particularly one with whom he has family, business, or financial ties.

(b) Exceptions authorized for employees under § 0.735-42 shall have equal application with respect to special Government employees.

§ 0.735-54 Miscellaneous statutory provisions.

Each special Government employee shall acquaint himself with each statute that relates to his ethical and other conduct as a special Government employee of NRC and of the Government. The NRC official responsible for his appointment shall call his attention specifically to §§ 0.735-21, 0.735-22, 0.735-23, 0.735-24(c), 0.735-25, 0.735-26, 0.735-27, and 0.735-30.

§ 0.735-55 Applicable standards of conduct.

Special Government employees shall adhere to the standards of conduct made applicable to such employees by Subpart B of this part and to the standards of conduct made applicable to regular employees by §§ 0.735-43, 0.735-44, 0.735-46, and 0.735-48. In addition, special Government employees who are not consultants or advisers shall also be subject to §§ 0.735-45 and 0.735-47.

ANNEX A—CODE OF ETHICS FOR GOVERNMENT SERVICE (5 U.S.C. 7301)

Any person in Government service should:

1. Put loyalty to the highest moral principles and to country above loyalty to persons, party, or Government department.

2. Uphold the Constitution, laws, and legal Regulations of the United States and of all governments therein and never be a party to their evasion.

3. Give a full day's labor for a full day's pay; giving to the performance of his duties his earnest effort and best thought.

4. Seek to find and employ more efficient and economical ways of getting tasks accomplished.

5. Never discriminate unfairly by the dispensing of special favors or privileges to anyone, whether for remuneration or not; and never accept, for himself or his family, favors or benefits under circumstances which might be construed by reasonable

persons as influencing the performance of his governmental duties.

6. Make no private promises of any kind binding upon the duties of office, since a Government employee has no private word which can be binding on public duty.

7. Engage in no business with the Government, either directly or indirectly, which is inconsistent with the conscientious performance of his governmental duties.

8. Never use any information coming to him confidentially in the performance of governmental duties as a means for making private profit.

9. Expose corruption wherever discovered.

10. Uphold these principles, ever conscious that public office is a public trust.

[46 FR 51717, Oct. 22, 1981]

PART 1—STATEMENT OF ORGANIZATION AND GENERAL INFORMATION

Subpart A—Introduction

Sec.
1.1 Creation and authority.
1.3 Sources of additional information.
1.5 Location of principal offices and Regional Offices.

Subpart B—Headquarters

1.11 The Commission.

PANELS, BOARDS, AND COMMITTEES

1.13 Advisory Committee on Reactor Safeguards.
1.15 Atomic Safety and Licensing Board Panel.
1.17 Atomic Safety and Licensing Appeal Panel.
1.18 Advisory Committee on Nuclear Waste.
1.19 Other committees, boards, and panels.

COMMISSION STAFF

1.23 Office of the General Counsel.
1.25 Office of the Secretary of the Commission.
1.26 Office of the Licensing Support System Administrator.
1.27 [Reserved]
1.29 Office of Governmental and Public Affairs.

EXECUTIVE DIRECTOR FOR OPERATIONS

1.31 Office of the Executive Director for Operations.

STAFF OFFICES

1.32 Office of Enforcement.
1.33 Office of Administration.

Sec.
1.34 Office of Information Resources Management.
1.35 Office for Analysis and Evaluation of Operational Data.
1.36 Office of Investigations.
1.37 Office of Small and Disadvantaged Business Utilization and Civil Rights.
1.38 Office of the Controller.
1.39 Office of Personnel.
1.40 Office of Consolidation.

PROGRAM OFFICES

1.41 Office of Nuclear Material Safety and Safeguards.
1.43 Office of Nuclear Reactor Regulation.
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Subpart C—NRC Seal and Flag

1.51 Description and custody of NRC seal.
1.53 Use of NRC seal or replicas.
1.55 Establishment of official NRC flag.
1.57 Use of NRC flag.
1.59 Report of violations.

AUTHORITY: Sec. 23, 161, 68 Stat. 925, 948, as amended (42 U.S.C. 2033, 2201); sec. 29, Pub. L. 85-256, 71 Stat. 579, Pub. L. 95-209, 91 Stat. 1483 (42 U.S.C. 2039); sec. 191, Pub. L. 87-615, 76 Stat. 409 (42 U.S.C. 2241); secs. 201, 203, 204, 205, 209, 88 Stat. 1242, 1244, 1245, 1246, 1248, as amended (42 U.S.C. 5841, 5843, 5844, 5845, 5849); 5 U.S.C. 552, 553; Reorganization Plan No. 1 of 1980, 45 FR 40561, June 16, 1980.

SOURCE: 52 FR 31602, Aug. 21, 1987, unless otherwise noted.

Subpart A—Introduction

§ 1.1 Creation and authority.

(a) The Nuclear Regulatory Commission was established by the Energy Reorganization Act of 1974, as amended, Pub. L. 93-438, 88 Stat. 1233 (42 U.S.C. 5801 et seq.). This Act abolished the Atomic Energy Commission and, by section 201, transferred to the Nuclear Regulatory Commission all the licensing and related regulatory functions assigned to the Atomic Energy Commission by the Atomic Energy Act of 1954, as amended, Pub. L. 83-703, 68 Stat. 919 (42 U.S.C. 2011 et seq.). These functions included those of the Atomic Safety and Licensing Board Panel and the Atomic Safety and Licensing Appeal Panel. The Energy Reorganization Act became effective January 19, 1975 (E.O. 11834).

(b) As used in this part:

"Commission" means the five members of the Nuclear Regulatory Commission or a quorum thereof sitting as a body, as provided by section 201 of the Energy Reorganization Act of 1974, as amended.

"NRC" means the Nuclear Regulatory Commission, the agency established by Title II of the Energy Reorganization Act of 1974, as amended, comprising the members of the Commission and all offices, employees, and representatives authorized to act in any case or matter.

§ 1.3 Sources of additional information.

(a) A statement of the NRC's organization, policies, procedures, assignments of responsibility, and delegations of authority is in the Nuclear Regulatory Commission Manual and other elements of the NRC's Management Directives System, including local directives issued by Regional Offices. Letters/memoranda delegations of authority are also issued from time to time that have not yet been incorporated into the Manual, parts of which are republished periodically. Copies of the Manual and other delegations of authority are available for public inspection and copying for a fee at the NRC Public Document Room, 2120 L Street, NW., Washington, DC, and at each of NRC's Regional Offices. Information may also be obtained from the Office of Governmental and Public Affairs or from Public Affairs Officers at the Regional Offices. In addition, "NRC Functional Organization Charts" (NUREG-0325) contains detailed descriptions of the functional responsibilities of NRC's offices. It is revised annually and is available for public inspection at the NRC Public Document Room or for purchase from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 37082, Washington, DC 20013-7082; or from the National Technical Information Service, Springfield, VA 22161.

(b) Commission meetings are open to the public, as provided by the Government in the Sunshine Act, unless they fall within an exemption to the Act's openness requirement and the Commission also has determined that the public interest requires that those particular meetings be closed. Information concerning Commission meetings may be obtained from the Office of the Secretary.

(c) Information regarding the availability of NRC records under the Freedom of Information Act and the Privacy Act of 1974 may be obtained from the Division of Freedom of Information and Publications Services, Office of Administration. NRC's regulations are published in the FEDERAL REGISTER and codified in Title 10, Chapter I, of the Code of Federal Regulations. They are also published in looseleaf form as "NRC Rules and Regulations," and available on a subscription basis from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 37082, Washington, DC 20013-7082. Final opinions made in the adjudication of cases are published in "Nuclear Regulatory Commission Issuances," and available on a subscription basis from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

[52 FR 31602, Aug. 21, 1987, as amended at 53 FR 43419, Oct. 27, 1988; 53 FR 52993, Dec. 30, 1988; 54 FR 53313, Dec. 28, 1989]

§ 1.5 Location of principal offices and Regional Offices.

(a) The principal NRC offices are located in the Washington, DC area. Facilities for the service of process and papers are maintained within the District of Columbia at 2120 L Street NW., and in the State of Maryland at 11555 Rockville Pike, Rockville, Maryland. The mailing address for all NRC Headquarters offices is Washington, DC 20555. The locations of NRC offices in the Washington, DC area are as follows:

(1) Capital Place, 80 F Street NW., Washington, DC.

(2) East West/West Towers Building, 4350 East West Highway, Bethesda, Maryland.

(3) Gelman Building, 2120 L Street NW., Washington, DC.

(4) Maryland National Bank Building, 7735 Georgetown Road, Bethesda, Maryland.

(5) Nicholson Lane/North Building, 5620 Nicholson Lane, Rockville, Maryland.

(6) Nicholson Lane/South Building, 5650 Nicholson Lane, Rockville, Maryland.

(7) One White Flint North Building, 11555 Rockville Pike, Rockville, Maryland.

(8) Phillips Building, 7920 Norfolk Avenue, Bethesda, Maryland.

(9) Woodmont Building, 8120 Woodmont Avenue, Bethesda, Maryland.

(b) The addresses of the NRC Regional Offices are as follows:

Region I, USNRC, 475 Allendale Road, King of Prussia, PA 19406.

Region II, USNRC, 101 Marietta Street, NW, Suite 2900, Atlanta, GA 30323.

Region III, USNRC, 799 Roosevelt Road, Glen Ellyn, IL 60137.

Region IV, USNRC, 611 Ryan Plaza Drive, Suite 1000, Arlington, TX 76011.

USNRC, Region IV Uranium Recovery Field Office, 730 Simms Street, P.O. Box 25325, Denver, CO 80225.

Region V, USNRC, 1450 Maria Lane, Suite 210, Walnut Creek, CA 94596.

[52 FR 31602, Aug. 21, 1987, as amended at 53 FR 1745, Jan. 22, 1988; 53 FR 3862, Feb. 10, 1988; 53 FR 17916, May 19, 1988; 53 FR 43419, Oct. 27, 1988; 54 FR 53313, Dec. 28, 1989]

Subpart B—Headquarters

§ 1.11 The Commission.

(a) The Nuclear Regulatory Commission, composed of five members, one of whom is designated by the President as Chairman, is established pursuant to section 201 of the Energy Reorganization Act of 1974, as amended. The Chairman is the principal executive officer of the Commission, and is responsible for the executive and administrative functions with respect to appointment and supervision of personnel, except as otherwise provided by the Energy Reorganization Act of 1974, as amended, and Reorganizaton Plan No. 1 of 1980 (45 FR 40561); distribution of business; use and expenditures of funds (except that the function of revising budget estimates and purposes is reserved to the Commission); and appointment, subject to approval of the Commission, of heads of major administrative units under the Commission. The Chairman is the official spokesman, as mandated by the Reorganization Plan No. 1 of 1980. The Chairman has ultimate authority for all NRC functions pertaining to an emergency involving an NRC Licensee. The Chairman's actions are governed by the general policies of the Commission.

(b) The Commission is responsible for licensing and regulating nuclear facilities and materials and for conducting research in support of the licensing and regulatory process, as mandated by the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; and the Nuclear Nonproliferation Act of 1978; and in accordance with the National Environmental Policy Act of 1969, as amended, and other applicable statutes. These responsibilities include protecting public health and safety, protecting the environment, protecting and safeguarding nuclear materials and nuclear power plants in the interest of national security, and assuring conformity with antitrust laws. Agency functions are performed through standards setting and rulemaking; technical reviews and studies; conduct of public hearings; issuance of authorizations, permits, and licenses; inspection, investigation, and enforcement; evaluation of operating experience; and confirmatory research. The Commission is composed of five members, appointed by the President and confirmed by the Senate.

(c) The following staff units and officials report directly to the Commission: Atomic Safety and Licensing Board Panel, Atomic Safety and Licensing Appeal Panel, Office of Inspector and Auditor, Office of Investigation, Office of the General Counsel, Office of the Secretary, and other committees and boards which are authorized or established specifically by the Act. The Advisory Committee on Reactor Safeguards also reports directly to the Commission.

(d)(1) For matters pertaining to Public and Congressional Affairs, the Office of Governmental and Public Affairs reports directly to the Chairman.

(2) For matters pertaining to International and State, Local, and Indian Tribe Programs, the Office of Govern-

mental and Public Affairs reports directly to the Commission.

INSPECTOR GENERAL

§ 1.12 Office of the Inspector General.

The Office of the Inspector General—

(a) Develops policies and standards that govern NRC's financial and management audit program;

(b) Plans, directs, and executes the long-range, comprehensive audit program;

(c) Conducts and reports on investigations and inquiries, as necessary, to ascertain and verify the facts with regard to the integrity of all NRC programs and operations;

(d) Investigates possible irregularities or alleged misconduct of NRC employees and contractors;

(e) Refers suspected or alleged criminal violations concerning NRC employees or contractors to the Department of Justice;

(f) Reviews existing and proposed legislation and regulations for their impact on economy and efficiency in the administration of NRC's programs and operations;

(g) Keeps the Commission and the Congress fully and currently informed, by means of semiannual and other reports, about fraud, abuse, and other serious deficiencies in NRC's programs and operations; and

(h) Maintains liaison with audit and inspector general organizations and other law enforcement agencies in regard to all matters relating to the promotion of economy and efficiency and the detection of fraud and abuse in programs and operations.

[54 FR 53313, Dec. 28, 1989]

PANELS, BOARDS, AND COMMITTEES

§ 1.13 Advisory Committee on Reactor Safeguards.

The Advisory Committee on Reactor Safeguards (ACRS) was established by section 29 of the Atomic Energy Act of 1954, as amended. Consisting of a maximum of 15 members, it reviews and reports on safety studies and applications for construction permits and facility operating licenses; advises the Commission with regard to hazards of proposed or existing reactor facilities and the adequacy of proposed reactor safety standards; upon request of the Department of Energy (DOE), reviews and advises with regard to the hazards of DOE nuclear activities and facilities; reviews any generic issues or other matters referred to it by the Commission for advice. The Committee, on its own initiative, may conduct reviews of specific generic matters or nuclear facility safety-related items. The ACRS conducts studies of reactor safety research and submits reports thereon to the U.S. Congress and the NRC as appropriate.

§ 1.15 Atomic Safety and Licensing Board Panel.

The Atomic Safety and Licensing Board Panel, established pursuant to section 191 of the Atomic Energy Act of 1954, as amended, conducts hearings for the Commission and such other regulatory functions as the Commission authorizes. The Panel is comprised of any number of Administrative Judges (full-time and part-time), who may be lawyers, physicists, engineers, and environmental scientists; and Administrative Law Judges, who hear antitrust, civil penalty, and other cases and serve as Atomic Safety and Licensing Board Chairmen. The Chief Administrative Judge develops and applies procedures governing the activities of Boards, Administrative Judges, and Administrative Law Judges and makes appropriate recommendations to the Commission concerning the rules governing the conduct of hearings. The Panel conducts all licensing and other hearings as directed by the Commission primarily through individual Atomic Safety and Licensing Boards composed of one or three Administrative Judges. Those boards are appointed by either the Commission or the Chief Administrative Judge.

§ 1.17 Atomic Safety and Licensing Appeal Panel.

The Atomic Safety and Licensing Appeal Panel is the organizational body from which are drawn Atomic Safety and Licensing Appeal Boards for particular proceedings. These three-member Appeal Boards exercise the authority and perform the review functions that would otherwise be exercised and performed by the Commission in facility licensing proceedings under 10 CFR Part 50 and such other licensing and enforcement proceedings as the Commission may specify, reviewing initial decisions and other issuances of Atomic Safety and Licensing Boards and other presiding officers. Appeal Boards perform such other regulatory functions as may be delegated to them by the Commission. The Panel is comprised of a Chief Administrative Judge, who serves as Chairman, and other Administrative Judges as may be appointed.

§ 1.18 Advisory Committee on Nuclear Waste.

The Advisory Committee on Nuclear Waste (ACNW) provides advice to the Commission on all aspects of nuclear waste management, as appropriate, within the purview of NRC's regulatory responsibilities. The primary emphasis of the ACNW is disposal but will also include other aspects of nuclear waste management such as handling, processing, transportation, storage, and safeguarding of nuclear wastes including spent fuel, nuclear wastes mixed with other hazardous substances, and uranium mill tailings. In performing its work, the committee examines and reports on specific areas of concern referred to it by the Commission or designated representatives of the Commission, and undertakes studies and activities on its own initiative as appropriate to carry out its responsibilities. The committee interacts with representatives of NRC, other Federal agencies, state and local governments, Indian Tribes, and private organizations, as appropriate, to fulfill its responsibilities.

[54 FR 53314, Dec. 28, 1989]

§ 1.19 Other committees, boards, and panels.

Under section 161a. of the Atomic Energy Act of 1954, as amended, the Commission may establish advisory bodies to make recommendations to it. Currently, four committees are in existence.

(a) The Advisory Committee on Medical Uses of Isotopes (ACMUI) was established by the Atomic Energy Commission in July 1958. The ACMUI, composed of physicians and scientists, considers medical questions referred to it by the NRC staff and renders expert opinions regarding medical uses of radioisotopes. The ACMUI also advises the NRC staff, as requested, on matters of policy regarding licensing of medical uses of radioisotopes.

(b) The Advisory Committee for the Decontamination of Three Mile Island, Unit 2, was established by the NRC in October 1980. Its purpose is to obtain input and views from the residents of the Three Mile Island area and afford Pennsylvania government officials an opportunity to participate in the Commission's decisional process regarding cleanup for Three Mile Island, Unit 2.

(c) The Nuclear Safety Research Review Committee (NSRRC) was established by the NRC in February 1988 for the purpose of reporting to the Commission through the Director of the Office of Nuclear Regulatory Research on important management matters in the direction of the Commission's nuclear safety research program. The committee activities cover all aspects of nuclear safety research including, but not limited to, accident management, plant aging, human factors and system reliability, earth science, waste disposal and seismic and structural engineering. In performing its activities, the committee evaluates and reports on the conformance of the nuclear safety research program to the NRC philosophy of nuclear regulatory research. The committee conducts specialized studies when requested by the Commission or Director of the Office of Nuclear Regulatory Research. The committee interacts with the Office of Research management staff and selected contractors in private industry, at national laboratories and universities.

(d) The Licensing Support System Advisory Review Panel (LSSARP) was established by the Commission on October 3, 1989, pursuant to 10 CFR 2.1011(e) of the Commission's regulations. The LSSARP provides advice to the Commission on the design, development, and operation of the Licensing Support System (LSS), an electronic information management system for use in the Commission's high-level radioactive waste (HLW) licensing proceeding. Membership consists of those interests that will be affected by the use of the LSS, and selected Federal agencies with expertise in large-scale electronic information systems. The individual representatives of these interests and agencies possess expertise in management information science and in managing records of the Commission's licensing process for the HLW repository.

[52 FR 31602, Aug. 21, 1987, as amended at 54 FR 53314, Dec. 28, 1989]

COMMISSION STAFF

§ 1.23 Office of the General Counsel.

The Office of the General Counsel, established pursuant to section 25 of the Atomic Energy Act of 1954, as amended—

(a) Directs matters of law and legal policy, providing opinions, advice, and assistance to the agency with respect to all of its activities;

(b) Reviews and prepares appropriate draft Commission decisions on Atomic Safety and Licensing Appeal Board decisions and rulings, public petitions seeking direct Commission action, and rulemaking proceedings involving hearings;

(c) Provides interpretation of laws, regulations, and other sources of authority;

(d) Reviews the legal form and content of proposed official actions;

(e) Prepares or concurs in all contractual documents, interagency agreements, delegations of authority, regulations, orders, licenses, and other legal documents and prepares legal interpretations thereof;

(f) Reviews and directs intellectual property (patent) work;

(g) Represents and protects the interests of the NRC in legal matters and in court proceedings, and in relation to other government agencies, administrative bodies, committees of Congress, foreign governments, and members of the public; and

(h) Represents the NRC staff as a party in NRC administrative hearings.

§ 1.25 Office of the Secretary of the Commission.

The Office of the Secretary of the Commission—

(a) Provides general management services to support the Commission and to implement Commission decisions; and advises and assists the Commission and staff on the planning, scheduling, and conduct of Commission business including preparation of internal procedures;

(b) Prepares the Commission's meeting agenda;

(c) Manages the Commission Staff Paper and COMSECY systems;

(d) Receives, processes, and controls Commission mail, communications, and correspondence;

(e) Maintains the Commission's official records and acts as Freedom of Information administrative coordinator for Commission records;

(f) Codifies Commission decisions in memoranda directing staff action and monitors compliance;

(g) Receives, processes, and controls motions and pleadings filed with the Commission; issues and serves adjudicatory orders on behalf of the Commission; receives and distributes public comments in rulemaking proceedings, issues proposed and final rules on behalf of the Commission; maintains the official adjudicatory and rulemaking dockets of the Commission; and exercises responsibilities delegated to the Secretary in 10 CFR 2.702 and 2.772;

(h) Directs and administers the Headquarters NRC Public Document Room;

(i) Administers the NRC Historical Program;

(j) Integrates office automation initiatives into the Commission's administrative system;

(k) Functions as the NRC Federal Advisory Committee Management Officer; and

(l) Provides guidance and direction on the use of the NRC seal and flag.

§ 1.26 Office of the Licensing Support System Administrator.

The Office of the Licensing Support System (LSS) Administrator—

(a) Ensures that the LSS meets the requirements of 10 CFR part 2, subpart J, concerning the availability and use of the LSS in the Commission's high-level waste licensing proceedings;

(b) Advises DOE on LSS design, development, and testing;

(c) Approves any necessary redesign of the LSS;

(d) Provides the necessary personnel, materials, and services for operation and maintenance of the LSS;

(e) Provides for the entry of documentary material into the LSS, and provides access to the LSS to LSS participants and to the public as appropriate;

(f) Maintains the integrity and security of the LSS database;

(g) Reviews the timeliness and degree of compliance of LSS participants with the applicable LSS rules, including determining whether DOE is in substantial compliance with the document submission requirements of 10 CFR 2.1003; and

(h) Maintains sufficient oversight of LSS-related activities to not only identify issues, but to ensure that these issues are properly addressed by the right organization(s) and are being resolved on a timely basis.

[54 FR 53314, Dec. 28, 1989]

§ 1.29 Office of Governmental and Public Affairs.

The Office of Governmental and Public Affairs—

(a) Establishes and maintains good communications and working relationships between the NRC and other Governmental and public constituents;

(b) Provides advice and assistance to the Chairman, Commission, and NRC staff on all NRC relations with Congress, State and local Governments, Indian Tribe Organizations, the State Department, the international nuclear community, the news media, and the public;

(c) Serves as primary contact for policy matters between the NRC and these external groups, developing policies for Commission consideration on how NRC should effectively interact with these groups;

(d) Keeps the agency apprised of these groups' activities as they may affect NRC and conveys to NRC management these groups' views toward NRC policies, plans, and activities;

(e) Issues export and import licenses and participates in formulation of policies on nonproliferation issues, international safeguards, and physical security; and

(f) Administers State Agreements program by—

(1) Providing training and technical assistance to Agreement States;

(2) Integrating State/Federal regulatory activities; and

(3) Maintaining the information exchange and analysis program on State activities.

EXECUTIVE DIRECTOR FOR OPERATIONS

§ 1.31 Office of the Executive Director for Operations.

(a) The Executive Director for Operations (EDO) reports for all matters to the Chairman, and is subject to the supervision and direction of the Chairman as provided in Reorganization Plan No. 1 of 1980.

(b) The EDO supervises and coordinates policy development and operational activities in the following line offices: The Office of Nuclear Reactor Regulation, the Office of Nuclear Material Safety and Safeguards, the Office of Nuclear Regulatory Research, and the NRC Regional Offices; and the following staff offices: The Office of Enforcement, the Office of Administration, the Office of Information Resources Management, the Office of the Controller, the Office of Investigations, the Office of Consolidation, the Office for Analysis and Evaluation of Operational Data, the Office of Small and Disadvantaged Business Utilization and Civil Rights, the Office of Personnel, and other organizational units as shall be assigned by the Commission. The EDO is also responsible for implementation of the Commission's policy directives pertaining to these offices.

(c) The EDO exercises powers and functions delegated to the EDO under the Reorganization Plan No. 1 of 1980, this chapter, or otherwise by the Commission or Chairman, as appropriate. The EDO has the authority to perform any function that may be performed by an office director reporting to the EDO.

[54 FR 53314, Dec. 28, 1989]

STAFF OFFICES

§ 1.32 Office of Enforcement.

The Office of Enforcement—

(a) Develops policies and programs for enforcement of NRC requirements;

(b) Manages major enforcement actions; and

(c) Assesses the effectiveness and uniformity of Regional enforcement actions.

[54 FR 53315, Dec. 28, 1989]

§ 1.33 Office of Administration.

The Office of Administration—

(a) Develops and implements agency-wide contracting policies and procedures;

(b) Develops policies and procedures and manages the operation and maintenance of NRC offices, facilities, and equipment;

(c) Plans, develops, establishes, and administers policies, standards, and procedures for the overall NRC security program;

(d) Develops and implements policies and procedures for administering the Freedom of Information, Privacy, and Regulatory Flexibility Acts and the LPDR program, and for providing editorial and related publications services; and

(e) Manages the production, printing, and copying of NUREGs and other official NRC publications and maintains NRC liaison with the Joint Committee on Printing.

[54 FR 53315, Dec. 28, 1989]

§ 1.34 Office of Information Resources Management.

The Office of Information Resources Management—

(a) Manages the centralized information resources of the agency in the areas of computer hardware and software, systems development, telecommunications, and information support services including document control and distribution, central files, records management and services, the Library, and graphics; and

(b) Participates in the review of information resources management policies, practices, and procedures on an NRC-wide basis, and in consultation with cognizant officials, makes recommendations for appropriate improvements.

[54 FR 53315, Dec. 28, 1989]

§ 1.35 Office for Analysis and Evaluation of Operational Data.

The Office for Analysis and Evaluation of Operational Data—

(a) Analyzes and evaluates operational safety data associated with NRC-licensed activities to identify safety issues that require NRC or industry action;

(b) Provides timely feedback of findings and evaluations to NRC staff, licensees, Congress, the public, and organizations, as appropriate;

(c) Identifies NRC needs for operational data and related technical information and provides the NRC focal point for coordination of generic operational safety data and systems with the industry and other agencies;

(d) Develops and manages the NRC program for response to incidents and emergencies, including the timely notification of events to NRR, NMSS, and the Regions, as appropriate;

(e) Develops and provides appropriate technical training for NRC staff;

(f) Develops and manages the agency program for reactor performance indicators;

(g) Develops and directs the agency program for diagnostic evaluations and for investigation of significant operational incidents;

(h) Manages and conducts the support functions for the Committee to Review Generic Requirements (CRGR) in a manner that is consistent with CRGR charter; and

(i) Ensures the administrative processes and functions specified in the CRGR charter are implemented in a thorough and timely manner.

§ 1.36 Office of Investigations.

The Office of Investigations (OI)—

(a) Conducts investigations of licensees, applicants, their contractors or vendors, including the investigation of all allegations of wrongdoing by other than NRC employees and contractors;

(b) Maintains current awareness of inquiries and inspections by other NRC offices to identify the need for formal investigations;

(c) Makes appropriate referrals to the Department of Justice;

(d) Maintains liaison with other agencies and organizations to ensure the timely exchange of information of mutual interest; and

(e) Issues subpoenas where necessary or appropriate for the conduct of investigations.

[54 FR 53315, Dec. 28, 1989]

§ 1.37 Office of Small and Disadvantaged Business Utilization and Civil Rights.

The Office of Small and Disadvantaged Business Utilization and Civil Rights—

(a) Develops and implements an effective small and disadvantaged business program in accordance with the Small Business Act, as amended, and plans and implements NRC policies and programs relating to equal employment oppportunity and civil rights matters as required by the Equal Employment Opportunity Commission (EEOC) and the Office of Personnel Management (OPM);

(b) Ensures that appropriate consideration is given to Labor Surplus Area firms and Women Business Enterprises, and conducts an outreach program aimed at contractors desiring to do business with NRC;

(c) Maintains liaison with other Government agencies and trade associations;

(d) Coordinates efforts with the Director, Division of Contracts, and Directors of other affected offices;

(e) Develops and recommends for approval by the Executive Director for Operations, NRC policy providing for equal employment opportunity in all aspects of Federal personnel practice;

(f) Develops, monitors, and evaluates the agency's equal employment opportunity efforts and affirmative action programs to ensure compliance with NRC policy;

(g) Serves as the principal contact with local and national public and private organizations to facilitate the NRC equal opportunity program; and

(h) Coordinates all efforts pertaining to small and disadvantaged business utilization and equal employment opportunity with Office Directors and Regional Administrators.

§ 1.38 Office of the Controller.

The Office of the Controller—

(a) Prepares the agency's Five-Year Plan and budget;

(b) Manages all accounting and financial systems management functions including payroll, travel, and license fees;

(c) Provides agency support for employee relocation services and internal control activities; and

(d) Manages the agency's internal control program.

[54 FR 53315, Dec. 28, 1989]

§ 1.39 Office of Personnel.

The Office of Personnel—

(a) Plans and implements NRC policies, programs, and services to provide for the effective organization, utilization, and development of the agency's human resources;

(b) Provides labor relations and personnel policy guidance and supporting services to NRC managers and employees;

(c) Provides training, benefits administration, and counseling services for NRC employees;

(d) Collects, analyzes, and provides data on the characteristics, allocation, utilization, and retention of NRC's workforce;

(e) Provides staffing advice and services to NRC managers and employees; and

(f) Provides executive resources management and organizational and managerial development services to the NRC.

§ 1.40 Office of Consolidation.

The Office of Consolidation—

(a) Provides overall coordination of planning, budgeting, and execution of tasks required to consolidate the NRC Headquarters staff at White Flint, Rockville, Maryland;

(b) Provides a single focus for management review, decisionmaking, and direction for activities undertaken to accomplish the consolidation of the Headquarters' staff; and

(c) Keeps NRC management and NRC employees as fully informed as possible about aspects of the consolidation, especially those which could affect their individual and collective performance of Agency missions and tasks.

[54 FR 53315, Dec. 28, 1989]

PROGRAM OFFICES

§ 1.41 Office of Nuclear Material Safety and Safeguards.

(a) The Office of Nuclear Material Safety and Safeguards is responsible for protecting the public health and safety, the common defense and security, and the environment by licensing, inspection, and environmental impact assessment for all nuclear facilities and activities, and for the import and export of special nuclear material.

(b) The Office responsibilities include—

(1) Development and implementation of NRC policy for the regulation of activities involving safety, quality, approval, and inspection of the use and handling of nuclear and other radioactive materials, such as uranium activities;

(2) Fuel fabrication and fuel development;

(3) Medical, industrial, academic, and commercial uses of radioactive isotopes;

(4) Safeguards activities;

(5) Transportation of nuclear materials, including certification of transport containers;

(6) Out-of-reactor spent fuel storage;

(7) Safe management and disposal of low-level and high-level radioactive wastes;

(8) Planning and direction of program for financial assurance of NMSS licensees; and

(9) Management of the decommissioning of facilities and sites when their licensed functions are over.

(c) Safeguards responsibilities include—

(1) Development of overall agency policy;

(2) Monitoring and assessment of the threat environment, including liaison with intelligence agencies, as appropriate; and

(3) Those licensing and review activities appropriate to deter and protect against threats of radiological sabotage and threats of theft or diversion of special nuclear material at fuel facilities and during transport.

(d) The Office identifies and takes action to control safety and safeguards issues for activities under its responsibility, including consulting and coordinating with international, Federal, State, and local agencies, as appropriate.

§ 1.43 Office of Nuclear Reactor Regulation.

The Office of Nuclear Reactor Regulation—

(a) Implements regulations and develops and implements policies, programs, and procedures for all aspects of licensing, inspection, and safeguarding of—

(1) Manufacturing, production, and utilization facilities, except for those concerning fuel reprocessing plants and isotopic enrichment plants;

(2) Receipt, possession, and ownership of source, byproduct, and special nuclear material used or produced at facilities licensed under 10 CFR Part 50;

(3) Operators of such facilities;

(4) Emergency preparedness at such facilities; and

(5) Contractors and suppliers of such facilities.

(b) Identifies and takes action regarding conditions and licensee performance that may adversely affect public health and safety, the environment, or the safeguarding of nuclear reactor facilities;

(c) Assesses and recommends or takes action regarding incidents or accidents;

(d) Provides special assistance as required in matters involving reactor facilities exempt from licensing;

(e) Provides guidance and implementation direction to Regional Offices on reactor licensing, inspection, and safeguards programs assigned to the Region, and appraises Regional program performance in terms of effectiveness and uniformity;

(f) Performs other functions required for implementation of the reactor licensing, inspection, and safeguards programs;

(g) Performs management of the NRC allegation program; and

(h) Performs review and evaluation related to regulated facilities insurance, indemnity, and antitrust matters.

§ 1.45 Office of Nuclear Regulatory Research.

The Office of Nuclear Regulatory Research—

(a) Plans, recommends, and implements programs of nuclear regulatory research, standards development, and resolution of generic safety issues for nuclear power plants and other facilities regulated by the NRC;

(b) Develops and promulgates all technical regulations;

(c) Coordinates research activities within and outside the agency including appointment of staff to committees and conferences; and

(d) Coordinates NRC participation in international standards-related activities and national volunteer standards efforts, including appointment of staff to committees.

§ 1.47 NRC Regional Offices.

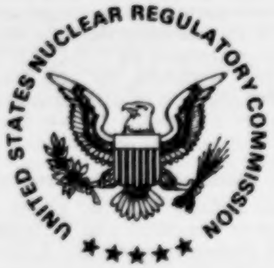
Each Regional Administrator executes established NRC policies and assigned programs relating to inspection, enforcement, licensing, State agreements, State liaison, and emergency response within Regional boundaries set out in § 1.5(b) of this part.

Subpart C—NRC Seal and Flag

§ 1.51 Description and custody of NRC seal.

(a) Pursuant to section 201(a) of the Energy Reorganization Act of 1974, the Nuclear Regulatory Commission, has adopted an official seal. Its description is as follows: An American bald eagle (similar to that on the Great Seal of the United States of America) of brown and tan with claws and beak of yellow, behind a shield of red, white, and blue, clutching a cluster of thirteen arrows in its left claw and a green olive branch in its right claw, positioned on a field of white, with the words "United States Nuclear Regulatory Commission" in dark blue encircling the eagle. The eagle represents the United States of America and its interests.

(b) The Official Seal of the Nuclear Regulatory Commission is illustrated as follows:



(c) The Secretary of the Commission is responsible for custody of the impression seals and of replica (plaque) seals.

§ 1.53 Use of NRC seal or replicas.

(a) The use of the seal or replicas is restricted to the following:

(1) NRC letterhead stationery;

(2) NRC award certificates and medals;

(3) Security credentials and employee identification cards;

(4) NRC documents, including agreements with States, interagency or governmental agreements, foreign patent applications, certifications, special reports to the President and Congress and, at the discretion of the Secretary of the Commission, such other documents as the Secretary finds appropriate;

(5) Plaques—the design of the seal may be incorporated in plaques for display at NRC facilities in locations such as auditoriums, presentation rooms, lobbies, offices of senior officials, on the fronts of buildings, and other places designated by the Secretary;

(6) The NRC flag (which incorporates the design of the seal);

(7) Official films prepared by or for the NRC, if deemed appropriate by

the Director of Governmental and Public Affairs;

(8) Official NRC publications that represent an achievement or mission of NRC as a whole, or that are cosponsored by NRC and other Government departments or agencies; and

(9) Any other uses as the Secretary of the Commission finds appropriate.

(b) Any person who uses the official seal in a manner other than as permitted by this section shall be subject to the provisions of 18 U.S.C. 1017, which provides penalties for the fraudulent or wrongful use of an official seal, and to other provisions of law as applicable.

§ 1.55 Establishment of official NRC flag.

The official flag is based on the design of the NRC seal. It is 50 inches by 66 inches in size with a 38-inch diameter seal incorporated in the center of a dark blue field with a gold fringe.

§ 1.57 Use of NRC flag.

(a) The use of the flag is restrictd to the following:

(1) On or in front of NRC installations;

(2) At NRC ceremonies;

(3) At conferences involving official NRC participation (including permanent display in NRC conference rooms);

(4) At Governmental or public appearances of NRC executives;

(5) In private offices of senior officials; or

(6) As the Secretary of the Commission otherwise authorizes.

(b) The NRC flag must only be displayed together with the U.S. flag.

When they are both displayed on a speaker's platform, the U.S. flag must occupy the position of honor and be placed at the speaker's right as he or she faces the audience, and the NRC flag must be placed at the speaker's left.

§ 1.59 Report of violations.

In order to ensure adherence to the authorized uses of the NRC seal and flag as provided in this subpart, a report of each suspected violation of this subpart, or any questionable use of the NRC seal or flag, should be submitted to the Secretary of the Commission.

PART 2—RULES OF PRACTICE FOR DOMESTIC LICENSING PROCEEDINGS

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2.201 Notice of violation.
2.202 Order to show cause.
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Subpart C—[Reserved]

Subpart D—Additional Procedures Applicable to Proceedings for the Issuance of Licenses To Construct or Operate Nuclear Power Plants of Duplicate Design at Multiple Sites

2.400 Scope of subpart.
2.401 Notice of hearing on applications pursuant to Appendix N of Part 50 for construction permits.
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2.403 Notice of proposed action on applications for operating licenses pursuant to Appendix N of Part 50.
2.404 Hearings on applications for operating licenses pursuant to Appendix N of Part 50.
2.405 Initial decisions in consolidated hearings.
2.406 Finality of decisions on separate issues.
2.407 Applicability of other sections.

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AUTHORITY: Secs. 161, 181, 68 Stat. 948, 953, as amended (42 U.S.C. 2201, 2231); sec. 191, as amended, Pub. L. 87-615, 76 Stat. 409 (42 U.S.C. 2241); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841); 5 U.S.C. 552.

Section 2.101 also issued under secs. 53, 62, 63, 81, 103, 104, 105, 68 Stat. 930, 932, 933, 935, 936, 937, 938, as amended (42 U.S.C. 2073, 2092, 2093, 2111, 2133, 2134, 2135); sec. 114(f), Pub. L. 97-425, 96 Stat. 2213, as amended (42 U.S.C. 10134(f)); sec. 102, Pub. L. 91-190, 83 Stat. 853, as amended (42 U.S.C. 4332); sec. 301, 88 Stat. 1248 (42 U.S.C. 5871). Sections 2.102, 2.103, 2.104, 2.105, 2.721 also issued under secs. 102, 103, 104, 105, 183, 189, 68 Stat. 936, 937, 938, 954, 955, as amended (42 U.S.C. 2132, 2133, 2134, 2135, 2233, 2239). Section 2.105 also issued under Pub. L. 97-415, 96 Stat. 2073 (42 U.S.C. 2239). Sections 2.200-2.206 also issued under secs. 186, 234, 68 Stat. 955, 83 Stat. 444, as amended (42 U.S.C. 2236, 2282); sec. 206, 88 Stat. 1246 (42 U.S.C. 5846). Sections 2.600-2.606 also issued under sec. 102, Pub. L. 91-190, 83 Stat. 853, as amended (42 U.S.C. 4332). Sections 2.700a, 2.719 also issued under 5 U.S.C. 554. Sections 2.754, 2.760, 2.770, 2.780 also issued under 5 U.S.C. 557. Section 2.764 and Table 1A of Appendix C also issued under secs. 135, 141, Pub. L. 97-425, 96 Stat. 2232, 2241 (42 U.S.C. 10155, 10161). Section 2.790 also issued under sec. 103, 68 Stat. 936, as amended (42 U.S.C. 2133) and 5 U.S.C. 552. Sections 2.800 and 2.808 also issued under 5 U.S.C. 553. Section 2.809 also issued under 5 U.S.C. 553 and sec. 29, Pub. L. 85-256, 71 Stat. 579, as amended (42 U.S.C. 2039). Subpart K also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239); sec. 134, Pub. L. 97-425, 96 Stat. 2230 (42 U.S.C. 10154). Subpart L also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239). Appendix A also issued under sec. 6, Pub. L. 91-

560, 84 Stat. 1473 (42 U.S.C. 2135). Appendix B also issued under sec. 10, Pub. L. 99-240, 99 Stat. 1842 (42 U.S.C. 2021b et seq.).

SOURCE: 27 FR 377, Jan. 13, 1962, unless otherwise noted.

§ 2.1 Scope.

This part governs the conduct of all proceedings, other than export and import licensing proceedings described in Part 110, under the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, for: (a) Granting, suspending, revoking, amending, or taking other action with respect to any license, construction permit, or application to transfer a license; (b) imposing civil penalties under section 234 of the Act; and (c) public rulemaking.

[40 FR 8776, Mar. 3, 1975, as amended at 43 FR 6921, Feb. 17, 1978]

§ 2.2 Subparts.

Each subpart other than Subpart G sets forth special rules applicable to the type of proceeding described in the first section of that subpart. Subpart G sets forth general rules applicable to all types of proceedings except rule making, and should be read in conjunction with the subpart governing a particular proceeding. Subpart I sets forth special procedures to be followed in proceedings in order to safeguard and prevent disclosure of Restricted Data.

§ 2.3 Resolution of conflict.

In any conflict between a general rule in Subpart G of this part and a special rule in another subpart or other part of this chapter applicable to a particular type of proceeding, the special rule governs.

[27 FR 377, Jan. 13, 1962, as amended at 28 FR 10152, Sept. 17, 1963]

§ 2.4 Definitions.

As used in this part,

"ACRS" means the Advisory Committee on Reactor Safeguards established by the Act.

"Act" means the Atomic Energy Act of 1954, as amended (68 Stat. 919).

"Adjudication" means the process for the formulation of an order for the final disposition of the whole or any part of any proceeding subject to this part, other than rule making.

"Administrative Law Judge" means an individual appointed pursuant to section 11 of the Administrative Procedure Act to conduct proceedings subject to this part.

"Commission" means the Commission of five members or a quorum thereof sitting as a body, as provided by section 201 of the Energy Reorganization Act of 1974 (88 Stat. 1242), or any officer to whom has been delegated authority pursuant to section 161n of the Act.

"Commission adjudicatory employee" means—

(1) The Commissioners and members of their personal staffs;

(2) The members of the Atomic Safety and Licensing Appeal Panel and staff assistants to the Panel;

(3) The members of the Atomic Safety and Licensing Board Panel and staff assistants to the Panel;

(4) A presiding officer appointed under § 2.704, including an administrative law judge, and staff assistants to a presiding officer;

(5) Special assistants (as defined in § 2.772);

(6) The General Counsel, the Solicitor, the Deputy General Counsel for Licensing and Regulation, and employees of the Office of the General Counsel under the supervision of the Solicitor or the Deputy General Counsel for Licensing and Regulation;

(7) The Secretary and employees of the Office of the Secretary; and

(8) Any other Commission officer or employee who is appointed by the Commission, the Secretary, or the General Counsel to participate or advise in the Commission's consideration of an initial or final decision in a proceeding. Any other Commission officer or employee who, as permitted by § 2.781, participates or advises in the Commission's consideration of an initial or final decision in a proceeding must be appointed as a Commission adjudicatory employee under this paragraph and the parties to the proceeding must be given written notice of the appointment.

"Contested proceeding" means (1) a proceeding in which there is a controversy between the staff of the Commission and the applicant for a license concerning the issuance of the license or any of the terms or conditions thereof or (2) a proceeding in which a petition for leave to intervene in opposition to an application for a license has been granted or is pending before the Commission.

"Department" means the Department of Energy established by the Department of Energy Organization Act (Pub. L. 95-91, 91 Stat. 565 42 U.S.C. 7101 *et seq.*) to the extent that the Department, or its duly authorized representatives, exercises functions formerly vested in the U.S. Atomic Energy Commission, its Chairman, members, officers and components and transferred to the U.S. Energy Research and Development Administration and to the Administrator thereof pursuant to sections 104 (b), (c) and (d) of the Energy Reorganization Act of 1974 (Pub. L. 93-438, 88 Stat. 1233 at 1237, 42 U.S.C. 5814) and retransferred to the Secretary of Energy pursuant to section 301(a) of the Department of Energy Organization Act (Pub. L. 95-91, 91 Stat. 565 at 577-578, 42 U.S.C. 7151).

"Electric utility" means any entity that generates or distributes electricity and which recovers the costs of this electricity, either directly or indirectly through rates established by the entity itself or by a separate regulatory authority. Investor-owned utilities including generation or distribution subsidiaries, public utility districts, municipalities, rural electric cooperatives, and State and Federal agencies, including associations of any of the foregoing, are included within the meaning of "electric utility."

"Ex parte communication" means an oral or written communication not on the public record with respect to which reasonable prior notice to all parties is not given.

"Facility" means a production facility or a utilization facility as defined in § 50.2 of this chapter.

"Investigative or litigating function" means—

(1) Personal participation in planning, conducting, or supervising an investigation; or

(2) Personal participation in planning, developing, or presenting, or in supervising the planning, development or presentation of testimony, argument, or strategy in a proceeding.

"License" means a license or construction permit issued by the Commission.

"Licensee" means a person who is authorized to conduct activities under a license or construction permit issued by the Commission.

"NRC personnel" means (1) NRC employees; (2) for the purpose of §§ 2.720 and 2.740 only, persons acting in the capacity of consultants to the Commission, regardless of the form of the contractual arrangements under which such persons act as consultants to the Commission; and (3) members of advisory boards, committees, and panels of the NRC; members of boards designated by the Commission to preside at adjudicatory proceedings; and officers or employees of Government agencies, including military personnel, assigned to duty at the NRC.

"NRC records and documents" means any book, paper, map, photograph, brochure, punch card, magnetic tape, paper tape, sound recording, pamphlet, slide, motion picture, or other documentary material regardless of form or characteristics, made by, in the possession of, or under the control of the NRC pursuant to Federal law or in connection with the transaction of public business as evidence of NRC organization, functions, policies, decisions, procedures, operations, programs or other activities. "NRC records and documents" do not include objects or articles such as structures, furniture, tangible exhibits or models, or vehicles and equipment.

"Person" means (1) any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, government agency other than the Commission or the Department, except that the Department shall be considered a person with respect to those facilities of the Department specified in section 202 of the Energy Reorganization Act of 1974 (88 Stat. 1244),[4] any State or any political

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[4] The Department facilities specified in section 202 are:

Continued

subdivision of, or any political entity within a State, any foreign government or nation or any political subdivision of any such government or nation, or other entity; and (2) any legal successor, representative, agent, or agency of the foregoing.

"Public Document Room" means the place at 2120 L Street, NW., Washington, D.C., at which public records of the Commission will ordinarily be made available for inspection.

"Secretary" means the Secretary to the Commission.

Except as redefined in this section, words and phrases which are defined in the Act and in this chapter have the same meaning when used in this part.

[27 FR 377, Jan. 13, 1962, as amended at 28 FR 10152, Sept. 17, 1963; 29 FR 12830, Sept. 11, 1964; 31 FR 12776, Sept. 30, 1966; 35 FR 19501, Dec. 23, 1970; 38 FR 1500, Jan. 15, 1973; 40 FR 8776, Mar. 3, 1975; 45 FR 14200, Mar. 5, 1980; 49 FR 35752, Sept. 12, 1984; 53 FR 10365, Mar. 31, 1988; 53 FR 43419, Oct. 27, 1988]

Subpart A—Procedure for Issuance, Amendment, Transfer, or Renewal of a License

§ 2.100 Scope of subpart.

This subpart prescribes the procedures for issuance of a license; amendment of a license at the request of the licensee; and transfer and renewal of a license.

§ 2.101 Filing of application.

(a)(1) An application for a license or an amendment to a license shall be filed with the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as prescribed by the applicable provisions of this chapter. A prospective applicant may confer informally with the staff prior to the filing of an application.

(2) Each application for a license for a facility or for receipt of waste radioactive material from other persons for the purpose of commercial disposal by the waste disposal licensee will be assigned a docket number. However, to allow a determination as to whether an application for a construction permit or operating license for a production or utilization facility is complete and acceptable for docketing, it will be initially treated as a tendered application after it is received and a copy of the tendered application will be available for public inspection in the Commission's Public Document Room, 2120 L Street, NW., Washington, D.C. Generally, that determination will be made within a period of thirty (30) days. However, in selected construction permit applications, the Commission may decide to determine acceptability on the basis of the technical adequacy of the application as well as its completeness. In such cases, the Commission, pursuant to § 2.104(a), will direct that the notice of hearing be issued as soon as practicable after the application has been tendered, and the determination of acceptability will generally be made within a period of sixty (60) days. For docketing and other requirements for applications pursuant to Part 61 of this chapter, see paragraph (g) of this section.

(3) If the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, determines that a tendered application for a construction permit or operating license for a production or utilization facility, and/or any envi-

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(1) Demonstration Liquid Metal Fast Breeder reactors when operated as part of the power generation facilities of an electric utility system, or when operated in any other manner for the purpose of demonstrating the suitability for commercial application of such a reactor.

(2) Other demonstration nuclear reactors, except those in existence on January 19, 1975, when operated as part of the power generation facilities of an electric utility system, or when operated in any other manner for the purpose of demonstrating the suitability for commercial application of such a reactor.

(3) Facilities used primarily for the receipt and storage of high-level radioactive wastes resulting from licensed activities.

(4) Retrievable Surface Storage Facilities and other facilities authorized for the express purpose of subsequent long-term storage of high-level radioactive waste generated by the Administration, which are not used for, or are part of, research and development activities.

ronmental report required pursuant to Subpart A of Part 51 of this chapter, or part thereof as provided in paragraphs (a)(5) or (a-1) of this section are complete and acceptable for docketing, a docket number will be assigned to the application or part thereof, and the applicant will be notified of the determination. With respect to the tendered application and/or environmental report or part thereof that is acceptable for docketing, the applicant will be requested to:

(i) Submit to the Director of Nuclear reactor Regulation of Director of Nuclear Material Safety and Safeguards, as appropriate, such additional copies as the regulations in Part 50 and Subpart A of Part 51 require;

(ii) Serve a copy on the chief executive of the municipality in which the facility is to be located or, if the facility is not to be located within a municipality, on the chief executive of the county, and serve a notice of availability of the application or environmental report on the chief executives of the municipalities or counties which have been identified in the application or environmental report as the location of all or part of the alternative sites containing the following information: Docket number of the application, a brief description of the proposed site and facility; the location of the site and facility as primarily proposed and alternatively listed; the name, address, and telephone number of the applicant's representative who may be contacted for further information; notification that a draft environmental impact statement will be issued by the Commission and will be made available upon request to the Commission; and notification that if a request is received from the appropriate chief executive, the applicant will transmit a copy of the application and environmental report, and any changes to such documents which affect the alternative site location, to the executive who makes the request. In complying with the requirements of this paragraph (a)(3)(ii) the applicant should not make public distribution of those parts of the application subject to § 2.790(d). The applicant shall submit to the Director of Nuclear Reactor Regulation an affidavit that service of the notice of availability of the application or environmental report has been completed along with a list of names and addresses of those executives upon whom the notice was served; and

(iii) Make direct distribution of additional copies to Federal, State, and local officials in accordance with the requirements of this chapter and written instructions furnished to the applicant by the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate. Such written instructions will be furnished as soon as practicable after all or any part of the application, or environmental report, is tendered. The copies submitted to the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, and distributed by the applicant shall be completely assembled documents, identified by docket number. Subsequently distributed amendments to applications, however, may include revised pages to previous submittals and, in such cases, the recipients will be responsible for inserting the revised pages.

(4) The tendered application for a construction permit or operating license for a production or utilization facility will be formally docketed upon receipt by the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, of the required additional copies. Distribution of the additional copies shall be deemed to be complete as of the time the copies are deposited in the mail or with a carrier prepaid for delivery to the designated addresses. The date of docketing shall be the date when the required copies are received by the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate. Within ten (10) days after docketing the applicant shall submit to the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, an affidavit that distribution of the additional copies to Federal, State, and local officials has been completed in accordance with requirements of this chapter and written in-

structions furnished to the applicant by the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate. Amendments to the application and environmental report shall be filed and distributed and an affidavit shall be furnished to the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, in the same manner as for the initial application and environmental report. If it is determined that all or any part of the tendered application and/or environmental report is incomplete and therefore not acceptable for processing, the applicant will be informed of this determination, and the respects in which the document is deficient.

(5) An applicant for a construction permit for a production or utilization facility which is subject to § 51.20(b) of this chapter, and is of the type specified in § 50.21(b) (2) or (3) or § 50.22 of this chapter or is a testing facility may submit the information required of applicants by Part 50 of the chapter in three parts. One part shall be accompanied by the information required by § 50.30(f) of this chapter, another part shall include any information required by § 50.34(a) and, if applicable, § 50.34a of this chapter and a third part shall include any information required by § 50.33a. One part may precede or follow other parts by no longer than six (6) months except that the part including information required by § 50.33a shall be submitted in accordance with time periods specified in § 50.33a. If an applicant for a construction permit for a nuclear power reactor is exempted pursuant to § 50.33a of this chapter from filing the information described by § 50.33a of this chapter, such applicant shall file with the first part of its application an affidavit setting forth facts as to the electrical generating capacity of its system. If it is determined that any one of the parts as described above is incomplete and not acceptable for processing, the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, will inform the applicant of this determination and the respects in which the document is deficient. Such a determination of completeness will generally be made within a period of thirty (30) days. Except for the part including information required by § 50.33a, whichever part is filed first shall also include the fee required by §§ 50.30(e) and 170.21 of this chapter and the information required by §§50.33, 50.34((a)(1), and 50.37 of this chapter. The Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, will accept for docketing an application for a construction permit for a production or utilization facility which is subject to § 51.20(b) of this chapter, and is of the type specified in § 50.21(b) (2) or (3) or § 50.22 of this chapter or is a testing facility where one part of the application as described above is complete and conforms to the requirements of Part 50 of this chapter. Additional parts will be docketed upon a determination by the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, that they are complete.

(a-1) *Early consideration of site suitability issues.* An applicant for a construction permit for a utilization facility which is subject to § 51.20(b) of this chapter and is of the type specified in § 50.21(b) (2) or (3) or § 50.22 of this chapter or is a testing facility, may request that the Commission conduct an early review and hearing and render an early partial decision in accordance with Subpart F on issues of site suitability within the purview of the applicable provisions of Parts 50, 51 and 100 of this chapter. In such cases, the applicant for the construction permit may submit the information required of applicants by the provisions of this chapter in three or (in the case of nuclear power reactors) four parts:

(1) Part one shall include or be accompanied by any information required by §§ 50.34(a)(1) and 50.30(f) of this chapter which relates to the issue(s) of site suitability for which an early review, hearing and partial decision are sought, except that information with respect to operation of the facility at the projected initial power level need not be supplied, and shall include the information required by §§ 50.33(a) through (e) and 50.37 of

this chapter. The information submitted shall also include: (i) Proposed findings on the issues of site suitability on which the applicant has requested review and a statement of the bases or the reasons for those findings, (ii) a range of postulated facility design and operation parameters that is sufficient to enable the Commission to perform the requested review of site suitability issues under the applicable provisions of Parts 50, 51 and 100, and (iii) information concerning the applicant's site selection process and long-range plans for ultimate development of the site required by § 2.603(b)(1).

(2) Part two shall include or be accompanied by the remaining information required by §§ 50.30(f), 50.33 and 50.34(a)(1) of this chapter.

(3) Part three shall include the remaining information required by §§ 50.34(a) and (in the case of a nuclear power reactor) 50.34a of this chapter.

(4) The information required for part two or part three shall be submitted during the period the partial decision on part one is effective. Submittal of the information required for part three may precede by no more than six months or follow by no more than six months the submittal of the information required for part two.

(5) Part four,[1] which is only required when the application is for a construction permit for a nuclear power reactor, shall include any information required by § 50.33a of this chapter and shall be filed in accordance with the time periods specified in § 50.33a.

(b) After the application has been docketed each applicant for a license for receipt of waste radioactive material from other persons for the purpose of commercial disposal by the waste disposal licensee except applicants under Part 61 of this chapter, who must comply with paragraph (g) of this section, shall serve a copy of the application and environmental report, as appropriate, on the chief executive of the municipality in which the activity is to be conducted or, if the activity is not to be conducted within a municipality on the chief executive of the county, and serve a notice of availability of the application or environmental report on the chief executives of the municipalities or counties which have been identified in the application or environmental report as the location of all or part of the alternative sites, containing the following information: Docket number of the application; a brief description of the proposed site and facility; the location of the site and facility as primarily proposed and alternatively listed; the name, address, and telephone number of the applicant's representative who may be contacted for further information; notification that a draft environmental impact statement will be issued by the Commission and will be made available upon request to the Commission; and notification that if a request is received from the appropriate chief executive, the applicant will transmit a copy of the application and environmental report, and any changes to such documents which affect the alternative site location, to the executive who makes the request. In complying with the requirements of this paragraph (b) the applicant should not make public distribution of those parts of the application subject to § 2.790(d). The applicant shall submit to the Director of Nuclear Material Safety and Safeguards an affidavit that service of the notice of availability of the application or environmental report has been completed along with a list of names and addresses of those executives upon whom the notice was served.

(c) The notice published in the FEDERAL REGISTER announcing docketing of the antitrust information portion of an application for a facility construction permit under section 103 of the Act, except for those applications described in §§ 2.101(e) and 2.102(d)(2), shall state that:

(1) The portion of the application filed contains the information requested by the Attorney General for the purpose of an antitrust review of the application as set forth in Appendix L to Part 50 of this chapter;

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[1] For a construction permit application in four parts, part four shall be filed second in time since it must precede both parts two and three by a period of from 9 months to 3 years.

(2) Upon receipt and acceptance for docketing of the remaining portions of the application dealing with radiological health and safety and environmental matters, notice of receipt will be published in the FEDERAL REGISTER including an appropriate notice of hearing; and

(3) Any person who wishes to have his views on the antitrust matters of the application considered by the NRC and presented to the Attorney General for consideration should submit such views within sixty (60) days after publication of the notice announcing receipt and docketing of the antitrust information to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Chief, Policy Development and Technical Support Branch.

(d) The Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, will give notice of the docketing of the public health and safety, common defense and security, and environmental parts of an application for a license for a facility or for receipt of waste radioactive material from other persons for the purpose of commercial disposal by the waste disposal licensee, except that for applications pursuant to Part 61 of this chapter paragraph (g) of this section applies, to the Governor or other appropriate official of the State in which the facility is to be located or the activity is to be conducted and will cause to be published in the FEDERAL REGISTER a notice of docketing of the application which states the purpose of the application and specifies the location at which the proposed activity would be conducted.

(e)(1) Upon receipt of the antitrust information responsive to Regulatory Guide 9.3 submitted in connection with an application for a facility operating license under section 103 of the Act, the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, shall publish in the FEDERAL REGISTER and in appropriate trade journals a "Notice of Receipt of Operating License Antitrust Information." The notice shall invite persons to submit, within thirty (30) days after publication of the notice, comments or information concerning the antitrust aspects of the application to assist the Director in determining, pursuant to section 105c of the Act, whether significant changes in the licensee's activities or proposed activities have occurred since the completion of the previous antitrust review in connection with the construction permit. The notice shall also state that persons who wish to have their views on the antitrust aspects of the application considered by the NRC and presented to the Attorney General for consideration should submit such views within thirty (30) days after publication of the notice to: U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Chief, Policy Development and Technical Support Branch.

(2) If the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, after reviewing any comments or information received in response to the published notice and any comments or information regarding the applicant received from the Attorney General, concludes that there have been no significant changes since the completion of the previous antitrust review in connection with the construction permit, a finding of no significant changes shall be published in the FEDERAL REGISTER, together with a notice stating that any request for reevaluation of such finding should be submitted within thirty (30) days of publication of the notice. If no requests for reevaluation are received within that time, the finding shall become the NRC's final determination. Requests for a reevaluation of the no significant changes determination may be accepted after the date when the Director's finding becomes final but before the issuance of the OL only if they contain new information, such as information about facts or events of antitrust significance that have occurred since that date, or information that could not reasonably have been submitted prior to that date.

(3) If, as a result of a reevaluation of the finding described in paragraph (e)(2) of this section, it is determined that there have been no significant changes, the Director of Nuclear Reac-

tor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, shall deny the request and shall publish a notice of finding of no significant changes in the FEDERAL REGISTER. The notice and finding become the final NRC decision thirty (30) days after being made and only in the event that the Commission has not exercised sua sponte review.

(4) If the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, concludes that significant changes have occurred since the completion of the antitrust review in connection with the construction permit, then the provisions of § 2.102(d) apply.

(f)(1) Each application for a license to receive and possess high-level radioactive waste at a geologic repository operations area pursuant to Part 60 of this chapter and any environmental impact statement required in connection therewith pursuant to Subpart A of Part 51 of this chapter shall be processed in accordance with the provisions of this paragraph.

(2) To allow a determination as to whether the application is complete and acceptable for docketing, it will be initially treated as a tendered document, and a copy will be available for public inspection in the Commission's Public Document Room. Twenty copies shall be filed to enable this determination to be made.

(3) If the Director of Nuclear Material Safety and Safeguards determines that the tendered document is complete and acceptable for docketing, a docket number will be assigned and the applicant will be notified of the determination. If it is determined that all or any part of the tendered document is incomplete and therefore not acceptable for processing, the applicant will be informed of this determination and the respects in which the document is deficient.

(4) [Reserved]

(5) If a tendered document is acceptable for docketing, the applicant will be requested to (i) submit to the Director of Nuclear Material Safety and Safeguards such additional copies of the application and environmental impact statement as the regulations in Part 60 and Subpart A of Part 51 of this chapter require, (ii) serve a copy of such application and environmental impact statement on the chief executive of the municipality in which the geologic repository operations area is to be located, or if the geologic repository operations area is not to be located within a municipality, on the chief executive of the county (or to the Tribal organization, if it is to be located within an Indian reservation), and (iii) make direct distribution of additional copies to Federal, State, Indian Tribe, and local officials in accordance with the requirements of this chapter and written instructions from the Director of Nuclear Material Safety and Safeguards. All such copies shall be completely assembled documents, identified by docket number. Subsequently distributed amendments to the application, however, may include revised pages to previous submittals and, in such cases, the recipients will be responsible for inserting the revised pages.

(6) The tendered document will be formally docketed upon receipt by the Director of Nuclear Material Safety and Safeguards of the required additional copies. The date of docketing shall be the date when the required copies are received by the Director of Nuclear Material Safety and Safeguards. Within ten (10) days after docketing, the applicant shall submit to the Director of Nuclear Material Safety and Safeguards a written statement that distribution of the additional copies to Federal, State, Indian Tribe, and local officials has been completed in accordance with requirements of this chapter and written instructions furnished to the applicant by the Director of Nuclear Material Safety and Safeguards. Distribution of the additional copies shall be deemed to be complete as of the time the copies are deposited in the mail or with a carrier prepaid for delivery to the designated addressees.

(7) Amendments to the application and supplements to the environmental impact statement shall be filed and distributed and a written statement shall be furnished to the Director of Nuclear Material Safety and Safeguards in the same manner as for the

initial application and environmental impact statement.

(8) The Director of Nuclear Material Safety and Safeguards will cause to be published in the FEDERAL REGISTER a notice of docketing which identifies the State and location at which the proposed geologic repository operations area would be located and will give notice of docketing to the governor of that State. The notice of docketing will state that the Commission finds that a hearing is required in the public interest, prior to issuance of a construction authorization, and will recite the matters specified in § 2.104(a) of this part.

(g) Each application for a license to receive radioactive waste from other persons for disposal under Part 61 of this chapter and the accompanying environmental report shall be processed in accordance with the provisions of this paragraph.

(1) To allow a determination as to whether the application or environmental report is complete and acceptable for docketing, it will be initially treated as a tendered document, and a copy will be available for public inspection in the Commission's Public Document Room, 2120 L Street, NW., Washington, D.C. One original and two copies shall be filed to enable this determination to be made.

(i) Upon receipt of a tendered application, the Commission will publish in the FEDERAL REGISTER notice of the filed application and will notify the governors, legislatures and other appropriate State, county, and municipal officials and tribal governing bodies of the States and areas containing or potentially affected by the activities at the proposed site and the alternative sites. The Commission will inform these officials that the Commission staff will be available for consultation pursuant to § 61.71 of this chapter. The FEDERAL REGISTER notice will note the opportunity for interested persons to submit views and comments on the tendered application for consideration by the Commission and applicant. The Commission will also notify the U.S. Bureau of Indian Affairs when tribal governing bodies are notified.

(ii) The Commission will also post a public notice in a newspaper or newspapers of general circulation in the affected States and areas summarizing information contained in the applicant's tendered application and noting the opportunity to submit views and comments.

(iii) When the Director of Nuclear Material Safety and Safeguards determines that the tendered document is complete and acceptable for docketing, a docket number will be assigned and the applicant will be notified of the determination. If it is determined that all or any part of the tendered document is incomplete and therefore not acceptable for processing, the applicant will be informed of this determination and the aspects in which the document is deficient.

(2) With respect to any tendered document that is acceptable for docketing, the applicant will be requested to (i) submit to the Director of Nuclear Material Safety and Safeguards such additional copies as the regulations in Part 61 and Subpart A of Part 51 of this chapter require, (ii) serve a copy on the chief executive of the municipality in which the waste is to be disposed of or, if the waste is not to be disposed of within a municipality, serve a copy on the chief executive of the county in which the waste is to be disposed of, (iii) make direct distribution of additional copies to Federal State, Indian Tribe, and local officials in accordance with the requirements of this chapter and written instructions from the Director of Nuclear Material Safety and Safeguards, and (iv) serve a notice of availability of the application and environmental report on the chief executives or governing bodies of the municipalities or counties which have been identified in the application and environmental report as the location of all or part of the alternative sites if copies are not distributed under paragraph (g)(2)(iii) of this section to the executives or bodies. All distributed copies shall be completely assembled documents identified by docket number. Subsequently distributed amendments, however, may include revised pages to previous submittals and, in such cases, the recipients will be responsible for inserting the revised pages. In complying with the requirements of paragraph (g) of this

section the applicant shall not make public distribution of those parts of the application subject to § 2.790(d).

(3) The tendered document will be formally docketed upon receipt by the Director of Nuclear Material Safety and Safeguards of the required additional copies. Distribution of the additional copies shall be deemed to be complete as of the time the copies are deposited in the mail or with a carrier prepaid for delivery to the designated addressees. The date of docketing shall be the date when the required copies are received by the Director of Nuclear Material Safety and Safeguards. Within ten (10) days after docketing, the applicant shall submit to the Director of Nuclear Material Safety and Safeguards a written statement that distribution of the additional copies to Federal, State, Indian Tribe, and local officials has been completed in accordance with requirements of this section and written instructions furnished to the applicant by the Director of Nuclear Material Safety and Safeguards.

(4) Amendments to the application and environmental report shall be filed and distributed and a written statement shall be furnished to the Director of Nuclear Material Safety and Safeguards in the same manner as for the initial application and environmental report.

(5) The Director of Nuclear Material Safety and Safeguards will cause to be published in the FEDERAL REGISTER a notice of docketing which identifies the State and location of the proposed waste disposal facility and will give notice of docketing to the governor of that State and other officials listed in paragraph (g)(3) of this section and, in a reasonable period thereafter, publish in the FEDERAL REGISTER a notice pursuant to § 2.105 offering opportunity to request a hearing to the applicant and other affected persons.

[41 FR 15833, Apr. 15, 1976; 41 FR 16793, Apr. 22, 1976, as amended at 42 FR 22885, May 5, 1977; 43 FR 46293, Oct. 6, 1978; 44 FR 60716, Oct. 22, 1979; 46 FR 13976, Feb. 25, 1981; 47 FR 9985, Mar. 9, 1982; 47 FR 57477, Dec. 27, 1982; 49 FR 9399, Mar. 12, 1984; 52 FR 31608, Aug. 21, 1987; 53 FR 43419, Oct. 27, 1988; 54 FR 27869, July 3, 1989]

§ 2.102 Administrative review of application.

(a) During review of an application by the staff, an applicant may be required to supply additional information. The staff may request any one party to the proceeding to confer with the staff informally. In the case of a docketed application for a construction permit or an operating license for a facility, the staff shall establish a schedule for its review of the application, specifying the key intermediate steps from the time of docketing until the completion of its review.

(b) The Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, will refer the docketed application to the ACRS as required by law and in such additional cases as he or the Commission may determine to be appropriate. The ACRS will render to the Commission one or more reports as required by law or as requested by the Commission.

(c) The Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, will make each report of the ACRS a part of the record of the docketed application, and transmit copies to the appropriate State and local officials.

(d)(1) Except as provided in paragraph (d)(2) of this section, the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, will refer and transmit a copy of each docketed application for a construction permit or an operating license for a utilization or production facility under section 103 of the Act to the Attorney General as required by section 105c of the Act.

(2) The requirements of paragraph (d)(1) of this section do not apply to an application for an operating license for a production or utilization facility under section 103 of the Act for which the construction permit was also issued under section 103, unless the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, determines, after consultation with the Attorney General and in ac-

cordance with § 2.101(e), that such review is advisable on the ground that significant changes in the licensee's activities or proposed activities have occurred subsequent to the previous review of the Attorney General and the Commission under section 105c of the Act in connection with the construction permit.

(3) The Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, will cause the Attorney General's advice received pursuant to paragraph (d)(1) of this section to be published in the FEDERAL REGISTER promptly upon receipt, and will make such advice a part of the record in any proceeding on antitrust matters conducted in accordance with subsection 105c(5) and section 189a of the Act. The Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, will also cause to be published in the FEDERAL REGISTER a notice that the Attorney General has not rendered any such advice. Any notice published in the FEDERAL REGISTER pursuant to this subparagraph will also include a notice of hearing, if appropriate, or will state that any person whose interest may be affected by the proceeding may, pursuant to and in accordance with § 2.714, file a petition for leave to intervene and request a hearing on the antitrust aspects of the application. The notice will state that petitions for leave to intervene and requests for hearing shall be filed within 30 days after publication of the notice.

[27 FR 377, Jan. 13, 1962, as amended at 36 FR 13270, July 17, 1971; 37 FR 15130, July 28, 1972; 47 FR 9986, Mar. 9, 1982]

§ 2.103 Action on applications for byproduct, source, special nuclear material, and operator licenses.

(a) If the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, finds that an application for a byproduct, source, special nuclear material, or operator license complies with the requirements of the Act, the Energy Reorganization Act, and this chapter, he will issue a license. If the license is for a facility, or for receipt of waste radioactive material from other persons for the purpose of commercial disposal by the waste disposal licensee, or if it is to receive and possess high-level radioactive waste at a geologic repository operations area pursuant to Part 60 of this chapter, the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, will inform the State, tribal and local officials specified in § 2.104(e) of the issuance of the license. For notice of issuance requirements for licenses issued pursuant to Part 61 of this chapter, see § 2.106(d) of this part.

(b) If the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, finds that an application does not comply with the requirements of the Act and this chapter he may issue a notice of proposed denial or a notice of denial of the application and inform the applicant in writing of:

(1) The nature of any deficiencies or the reason for the proposed denial or the denial, and

(2) The right of the applicant to demand a hearing within twenty (20) days from the date of the notice or such longer period as may be specified in the notice.

[28 FR 10152, Sept. 17, 1963, as amended at 47 FR 57478, Dec. 27, 1982]

HEARING ON APPLICATION—HOW INITIATED

§ 2.104 Notice of hearing.

(a) In the case of an application on which a hearing is required by the Act or this chapter, or in which the Commission finds that a hearing is required in the public interest, the Secretary will issue a notice of hearing to be published in the FEDERAL REGISTER as required by law at least fifteen (15) days, and in the case of an application concerning a construction permit for a facility of the type described in § 50.21(b) or § 50.22 of this chapter or a testing facility, at least thirty (30) days, prior to the date set for hearing in the notice.[1] In addition, in the case

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[1] If the notice of hearing concerning an application for a construction permit for a

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of an application for a construction permit for a facility of the type described in § 50.22 of this chapter, or a testing facility, the notice (other than a notice pursuant to paragraph (d) of this section) shall be issued as soon as practicable after the application has been docketed: *Provided*, That if the Commission, pursuant to § 2.101(a)(2), decides to determine the acceptability of the application on the basis of its technical adequacy as well as completeness, the notice shall be issued as soon as practicable after the application has been tendered. The notice will state:

(1) The time, place, and nature of the hearing and/or prehearing conference, if any;

(2) The authority under which the hearing is to be held;

(3) The matters of fact and law to be considered; and

(4) The time within which answers to the notice shall be filed.

(b) In the case of an application for a construction permit for a facility on which the Act requires a hearing, the notice of hearing will, except as provided in paragraph (d) of this section and unless the Commission determines otherwise, state, in implementation of paragraph (a)(3) of this section:

(1) That, if the proceeding is a contested proceeding, the presiding officer will consider the following issues:[2]

(i) Whether in accordance with the provisions of § 50.35(a) of this chapter:

(*a*) The applicant has described the proposed design of the facility, including, but not limited to, the principal architectural and engineering criteria for the design, and has identified the major features or components incorporated therein for the protection of the health and safety of the public;

(*b*) Such further technical or design information as may be required to complete the safety analysis, and which can reasonably be left for later consideration will be supplied in the final safety analysis report;

(*c*) Safety features or components, if any, which require research and development, have been described by the applicant and the applicant has identified, and there will be conducted, a research and development program reasonably designed to resolve any safety questions associated with such features or components; and

(*d*) On the basis of the foregoing, there is reasonable assurance that (*1*) such safety questions will be satisfactorily resolved at or before the latest date stated in the application for completion of the proposed facility; and (*2*) taking into consideration the site criteria contained in Part 100 of this chapter, the proposed facility can be constructed and operated at the proposed location without undue risk to the health and safety of the public;

(ii) Whether the applicant is technically qualified to design and construct the proposed facility;

(iii) Whether the applicant is financially qualified to design and construct the proposed facility;

(iv) Whether the issuance of a permit for the construction of the facility will be inimical to the common defense and security or to the health and safety of the public;

(v) If the application is for a construction permit for a nuclear power reactor, a testing facility, a fuel reprocessing plant, or other facility whose construction or operation has been determined by the Commission to have a significant impact on the environment, whether, in accordance with the requirements of Subpart A of Part 51 of this chapter, the construction permit should be issued as proposed.

(2) That, if the proceeding is not a contested proceeding, the presiding officer will determine (i) without conducting a de novo evaluation of the application, whether the application and the record of the proceeding contain

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facility of the type described in § 50.21(b) or § 50.22 of this chapter or a testing facility does not specify the time and place of initial hearing, a subsequent notice will be published in the FEDERAL REGISTER which will provide at least thirty (30) days notice of the time and place of that hearing. After this notice is given the presiding officer may reschedule the commencement of the initial hearing for a later date or reconvene a recessed hearing without again providing thirty (30) days notice.

[2] Issues (i) to (iv) are the issues pursuant to the Atomic Energy Act of 1954, as amended. Issue (v) is the issue pursuant to the National Environmental Policy Act of 1969.

sufficient information, and the review of the application by the Commission's staff has been adequate to support affirmative findings on (b)(1) (i) through (iii) specified in this section and a negative finding on (b)(1)(iv) specified in this section proposed to be made and the issuance of the construction permit proposed by the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety or Safeguards, as appropriate, and (ii) if the application is for a construction permit for a nuclear power reactor, a testing facility, a fuel reprocessing plant, or other facility whose construction or operation has been determined by the Commission to have a significant impact on the environment, whether the review conducted by the Commission pursuant to the National Environmental Policy Act (NEPA) has been adequate.

(3) That, regardless of whether the proceeding is contested or uncontested, the presiding officer will, in accordance with Subpart A of Part 51 of this chapter.

(i) Determine whether the requirements of section 102(2) (A), (C) and (E) of the National Environmental Policy Act and Subpart A of Part 51 of this chapter have been complied with in the proceeding;

(ii) Independently consider the final balance among conflicting factors contained in the record of the proceeding with a view to determining the appropriate action to be taken; and

(iii) Determine whether the construction permit should be issued, denied, or appropriately conditioned to protect environmental values.

(c) In the case of an application for an operating license in which a hearing will be held, the notice of hearing will, except as provided in paragraph (d) of this section and unless the Commission determines otherwise, state, in implementation of paragraph (a)(3) of this section, that the presiding officer will consider any matters in controversy among the parties and may, where he or she determines that a serious safety, environmental, or common defense and security matter has not been raised by the parties, consider such other matter within the purview of:

(1) Whether there is reasonable assurance that construction of the facility will be substantially completed on a timely basis, in conformity with the construction permit and the application as amended, the provisions of the Act, and the regulations in this chapter;

(2) Whether the facility will operate in conformity with the application as amended, the provisions of the Act, and the regulations in this chapter;

(3) Whether there is reasonable assurance: (i) That the activities to be authorized by the operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the regulations in this chapter;

(4) Whether the applicant is technically and financially qualified to engage in the activities to be authorized by the operating license in accordance with the regulations in this chapter, except that the issue of financial qualification shall not be considered by the presiding officer in an operating license hearing if the applicant is an electric utility seeking a license to operate a utilization facility of the type described in § 50.21(b) of § 50.22;

(5) Whether the applicable provisions of Part 140 of this chapter have been satisfied;

(6) Whether issuance of the license will be inimical to the common defense and security or to the health and safety of the public; and

(7) If the application is for an operating license for a nuclear power reactor, a testing facility, or a fuel reprocessing plant, or other facility whose operation has been determined by the Commission to have a significant impact on the environment, whether, in accordance with the requirements of Subpart A of Part 51 of this chapter, the operating license should be issued as proposed.[3]

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[3] Issues (1) to (6) are the issues pursuant to the Atomic Energy Act of 1954, as amended. Issue (7) is the issue pursuant to the National Environmental Policy Act of 1969.

(d) In an application for a construction permit or an operating license for a facility on which a hearing is required by the Act or this chapter, or in which the Commission finds that a hearing is required in the public interest to consider the antitrust aspects of the application, the notice of hearing will, unless the Commission determines otherwise, state:

(1) A time of the hearing, which will be as soon as practicable after the receipt of the Attorney General's advice and compliance with sections 105 and 189a of the Act and this part;[4]

(2) The presiding officer for the hearing who shall be either an administrative law judge or an atomic safety and licensing board established by the Commission or by the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel;

(3) That the presiding officer will consider and decide whether the activities under the proposed license would create or maintain a situation inconsistent with the antitrust laws described in section 105a of the Act; and

(4) That matters of radiological health and safety and common defense and security, and matters raised under the National Environmental Policy Act of 1969, will be considered at another hearing if otherwise required or ordered to be held, for which a notice will be published pursuant to paragraphs (a) and (b) of this section, unless otherwise authorized by the Commission.

(e) The Secretary will give timely notice of the hearing to all parties and to other persons, if any, entitled by law to notice. The Secretary will transmit a notice of hearing on an application for a license for a production or utilization facility, for a license for receipt of waste radioactive material from other persons for the purpose of commercial disposal by the waste disposal licensee, for a license under Part 61 of this chapter, for a license to receive and possess high-level radioactive waste at a geologic repository operations area pursuant to Part 60 of this chapter, and for a license under Part 72 of this chapter to acquire, receive or possess spent fuel for the purpose of storage in an independent spent fuel storage installation (ISFSI) to the governor or other appropriate official of the State and to the chief executive of the municipality in which the facility is to be located or the activity is to be conducted or, if the facility is not to be located or the activity conducted within a municipality, to the chief executive of the county (or to the Tribal organization, if it is to be so located or conducted within an Indian reservation). The Secretary will transmit a notice of hearing on an application for a license under Part 72 of this chapter to acquire, receive or possess spent fuel, high-level radioactive waste or radioactive material associated with high-level radioactive waste for the purpose of storage in a monitored retrievable storage installation (MRS) to the same persons who received the notice of docketing under § 72.16(e) of this chapter.

[27 FR 377, Jan. 13, 1962]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 2.104, see the List of CFR Sections Affected in the Finding Aids section of this volume.

§ 2.105 Notice of proposed action.

(a) If a hearing is not required by the Act or this chapter, and if the Commission has not found that a hearing is in the public interest, it will, prior to acting thereon, cause to be published in the FEDERAL REGISTER a notice of proposed action with respect to an application for:

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[4] As permitted by subsection 105c of the Act, with respect to proceedings in which an application for a construction permit was filed prior to December 19, 1970, and proceedings in which a written request for antitrust review of an application for an operating license to be issued under section 104b has been made by a person who intervened or sought by timely written notice to the Commission to intervene in the construction permit proceeding for the facility to obtain a determination of antitrust considerations or to advance a jurisdictional basis for such determination within 25 days after the date of publication in the FEDERAL REGISTER or notice of filing of the application for an operating license or December 19, 1970, whichever is later, the Commission may issue a construction permit or operating license which contains the conditions specified in § 50.55b of this chapter before the antitrust aspects of the application are finally resolved.

(1) A license for a facility;

(2) A license for receipt of waste radioactive material from other persons for the purpose of commercial disposal by the waste disposal licensee. All licenses issued under Part 61 of this chapter shall be so noticed;

(3) An amendment of a license specified in paragraph (a) (1) or (2) of this section and which involves a significant hazards consideration;

(4) An amendment to an operating license for a facility licensed under § 50.21(b) or § 50.22 of this chapter or for a testing facility, as follows:

(i) If the Commission determines under § 50.58 of this chapter that the amendment involves no significant hazards consideration, though it will provide notice of opportunity for a hearing pursuant to this section, it may make the amendment immediately effective and grant a hearing thereafter; or

(ii) If the Commission determines under §§ 50.58 and 50.91 of this chapter that an emergency situation exists or that exigent circumstances exist and that the amendment involves no significant hazards consideration, it will provide notice of opportunity for a hearing pursuant to § 2.106 (if a hearing is requested, it will be held after issuance of the amendment);

(5) A license to receive and possess high-level radioactive waste at a geologic repository operations area pursuant to Part 60 of this chapter;

(6) An amendment to a license specified in paragraph (a)(5) of this section, or an amendment to a construction authorization granted in proceedings on an application for such a license, when such an amendment would authorize actions which may significantly affect the health and safety of the public;

(7) A license under Part 72 of this chapter to acquire, receive or possess spent fuel for the purpose of storage in an independent spent fuel storage installation (ISFSI) or to acquire, receive or possess spent fuel, high-level radioactive waste or radioactive material associated with high-level radioactive waste for the purpose of storage in a monitored retrievable storage installation (MRS);

(8) An amendment to a license specified in paragraph (a)(7) of this section when such an amendment presents a genuine issue as to whether the health and safety of the public will be significantly affected; or

(9) Any other license or amendment as to which the Commission determines that an opportunity for a public hearing should be afforded;

(10) In the case of an application for an operating license for a facility of a type described in § 50.21(b) or § 50.22 of this chapter or a testing facility, a notice of opportunity for hearing shall be issued as soon as practicable after the application has been docketed; or

(11) In the case of an application for a license to receive and possess high-level radioactive waste at a geologic repository operations area, a notice of opportunity for hearing, as required by this paragraph, shall be published prior to Commission action authorizing receipt of such wastes; this requirement is in addition to the procedures set out in §§ 2.101(f)(8) and 2.104 of this part, which provide for a hearing on the application prior to issuance of a construction authorization.

(b) The notice of proposed action will set forth:

(1) The nature of the action proposed;

(2) The manner in which a copy of the safety analysis and of the ACRS report, if any, may be obtained or examined.

(c) If an application for a license is complete enough to permit all evaluations, other than completion inspection, necessary for the issuance of a construction permit and operating license, the notice of proposed issuance of a construction permit may provide that on completion of construction and inspection the operating license will be issued without further prior notice.

(d) The notice of proposed action will provide that, within thirty (30) days from the date of publication of the notice in the FEDERAL REGISTER, or such lesse. period authorized by law as the Commission may specify:

(1) The applicant may file a request for a hearing; and

(2) Any person whose interest may be affected by the proceeding may file

a request for a hearing or a petition for leave to intervene if a hearing has already been requested.

(e)(1) If no request for a hearing or petition for leave to intervene is filed within the time prescribed in the notice, the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, may take the proposed action, inform the appropriate State and local officials, and publish in the FEDERAL REGISTER a notice of issuance of the license or other action.

(2) If a request for a hearing or a petition for leave to intervene is filed within the time prescribed in the notice, the presiding officer who shall be an Atomic Safety and Licensing Board established by the Commission or by the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition, and the Secretary or the presiding officer will issue a notice of hearing or an appropriate order. The presiding officer designated to rule on a request or petition concerning the antitrust aspects of an application may be either an Administrative Law Judge or an Atomic Safety and Licensing Board.

(f) Applications for facility licenses under section 103 of the Act and for facility operating licenses under section 104b of the Act as to which any person intervened or sought by timely written notice to the Commission to intervene in the construction permit proceeding to obtain a determination of antitrust considerations or to advance a jurisdictional basis for such determination are also subject to the provisions of §§ 2.101(b) and 2.102(d).

[27 FR 377, Jan. 13, 1962, as amended at 28 FR 10152, Sept. 17, 1963; 31 FR 12776, Sept. 30, 1966; 34 FR 9702, June 21, 1969; 34 FR 12255, July 25, 1969; 35 FR 19658, Dec. 25, 1970; 36 FR 4686, Mar. 11, 1971; 37 FR 15131, July 28, 1972; 37 FR 28711, Dec. 29, 1972; 38 FR 9585, Apr. 18, 1973]

EDITORIAL NOTE: For additional FEDERAL REGISTER citations affecting § 2.105, see the List of CFR Sections Affected in the Finding Aids section of this volume.

§ 2.106 Notice of issuance.

(a) The Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, will cause to be published in the FEDERAL REGISTER notice of, and will inform the State and local officials specified in § 2.104(e) of the issuance of:

(1) A license or an amendment of a license for which a notice of proposed action has been previously published; and

(2) An amendment of a license for a facility of the type described in § 50.21(b) or § 50.22 of this chapter, or a testing facility, whether or not a notice of proposed action has been previously published.

(b) The notice of issuance will set forth:

(1) The nature of the license or amendment;

(2) The manner in which copies of the safety analysis, if any, may be obtained and examined; and

(3) A finding that the application for the license or amendment complies with the requirements of the Act and this chapter.

(c) The Director of Nuclear Material Safety and Safeguards will also cause to be published in the FEDERAL REGISTER notice of, and will inform the State, local, and Tribal officials specified in § 2.104(e) of any action with respect to, an application for a license to receive and possess high-level radioactive waste at a geologic repository operations area pursuant to Part 60 of this chapter, or for the amendment to such license for which a notice of proposed action has been previously published.

(d) The Director of Nuclear Material Safety and Safeguards will also cause to be published in the FEDERAL REGISTER notice of, and will inform the State and local officials or tribal governing body specified in § 2.104(e) of any licensing action with respect to a license to receive radioactive waste from other persons for disposal under Part 61 of this chapter or the amendment of such a license for which a notice of proposed action has been previously published.

[37 FR 15131, July 28, 1972, as amended at 38 FR 9586, Apr. 18, 1973; 46 FR 13978, Feb. 25, 1981; 47 FR 57478, Dec. 27, 1982]

§ 2.107 Withdrawal of application.

(a) The Commission may permit an applicant to withdraw an application prior to the issuance of a notice of hearing on such terms and conditions as it may prescribe, or may, on receiving a request for withdrawal of an application, deny the application or dismiss it with prejudice. Withdrawal of an application after the issuance of a notice of hearing shall be on such terms as the presiding officer may prescribe.

(b) The withdrawal of an application does not authorize the removal of any document from the files of the Commission.

(c) The Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, will cause to be published in the FEDERAL REGISTER a notice of the withdrawal of an application if notice of receipt of the application has been previously published.

[27 FR 377, Jan. 13, 1962, as amended at 28 FR 10152, Sept. 17, 1963]

§ 2.108 Denial of application for failure to supply information.

(a) The Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, may deny an application if an applicant fails to respond to a request for additional information within thirty (30) days from the date of the request, or within such other time as may be specified.

(b) The Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, will cause to be published in the FEDERAL REGISTER a notice of denial when notice of receipt of the application has previously been published, but not notice of hearing has yet been published. The notice of denial will provide that, within thirty (30) days after the date of publication in the FEDERAL REGISTER (1) the applicant may demand a hearing, and (2) any person whose interest may be affected by the proceeding may file a petition for leave to intervene.

(c) When both a notice of receipt of the application and a notice of hearing have been published, the presiding officer, upon a motion made by the staff pursuant to § 2.730, will rule whether an application should be denied by the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, pursuant to paragraph (a).

[27 FR 377, Jan. 13, 1962, as amended at 39 FR 43195, Dec. 11, 1974]

§ 2.109 Effect of timely renewal application.

If, at least thirty (30) days prior to the expiration of an existing license authorizing any activity of a continuing nature, a licensee files an application for a renewal or for a new license for the activity so authorized, the existing license will not be deemed to have expired until the application has been finally determined.

[28 FR 10152, Sept. 17, 1963]

§ 2.110 Filing and administrative action on submittals for design review or early review of site suitability issues.

(a)(1) A submittal pursuant to Appendix O of Part 52 of this chapter shall be subject to §§ 2.101(a) and 2.790 to the same extent as if it were an application for a permit or license.

(2) Except as specifically provided otherwise by the provisions of Appendix Q to Part 52 of this chapter, a submittal pursuant to Appendix Q shall be subject to § 2.101(a) (2) through (4) to the same extent as if it were an application for a permit or license.

(b) Upon initiation of review by the staff of a submittal of a type described in paragraph (a)(1) of this section, the Director of Nuclear Reactor Regulation shall publish in the FEDERAL REGISTER a notice of receipt of the submittal, inviting comments from interested persons within 60 days of publication or such other time as may be specified, for consideration by the staff and ACRS in their review.

(c) Upon completion of review by the staff and the ACRS of a submittal of the type described in paragraph (a)(1) of this section, the Director of Nuclear Reactor Regulation shall publish in the FEDERAL REGISTER a determination as to whether or not the design is acceptable, subject to such conditions as may be appropriate, and place in the

Public Document Room an analysis of the design in the form of a report.

[40 FR 2976, Jan. 17, 1975, as amended at 42 FR 22885, May 5, 1977; 54 FR 15398, Apr. 18, 1989]

§ 2.111 Prohibition of sex discrimination.

No person shall on the ground of sex be excluded from participation in, be denied a license under, be denied the benefits of, or be subjected to discrimination under any program or activity carried on or receiving Federal assistance under the Act or the Energy Reorganization Act of 1974.

[40 FR 8777, Mar. 3, 1975]

Subpart B—Procedure for Imposing Requirements by Order, or for Modification, Suspension, or Revocation of a License, or for Imposing Civil Penalties

§ 2.200 Scope of subpart.

(a) This subpart prescribes the procedure in cases initiated by the staff, or upon a request by any person, to impose requirements by order, or to modify, suspend, or revoke a license, or to take other action as may be proper, against any person subject to the jurisdiction of the Commission.

(b) This subpart also prescribes the procedures in cases initiated by the staff to impose civil penalties pursuant to section 234 of the Act and section 206 of the Energy Reorganization Act of 1974.

[36 FR 16896, Aug. 26, 1971, as amended at 42 FR 28893, June 6, 1977; 48 FR 44172, Sept. 28, 1983]

§ 2.201 Notice of violation.

(a) Before instituting any proceeding to modify, suspend, or revoke a license or to take other action for alleged violation of any provision of the Act or this chapter or the conditions of the license, the Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support, a Regional Administrator, or the designee of either, will serve on the licensee or other person subject to the jurisdiction of the Commission a written notice of violation, except as provided in paragraph (c) of this section. The notice of violation will concisely state the alleged violation and will require that the licensee or any other person submit, within twenty (20) days of the date of the notice or other specified time, a written explanation or statement in reply including:

(1) Corrective steps which have been taken by the licensee or other person and the results achieved;

(2) Corrective steps which will be taken; and

(3) The date when full compliance will be achieved.

(b) The notice may require the licensee or other person subject to the jurisdiction of the Commission to admit or deny the violation and to state the reasons for the violation, if admitted. It may provide that, if an adequate reply is not received within the time specified in the notice, the Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support or the Deputy's designee, may issue an order to show cause why the license should not be modified, suspended or revoked or why such other action as may be proper should not be taken.

(c) When the Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support, or the Deputy's designee, finds that the public health, safety, or interest so requires, or that the violation is willful, the notice of violation may be omitted and an order to show cause issued.

[27 FR 10826, Nov. 7, 1962, as amended at 48 FR 44172, Sept. 28, 1983; 52 FR 31608, Aug. 21, 1987; 54 FR 53315, Dec. 28, 1989]

§ 2.202 Order to show cause.

(a) The Executive Director for Operations during an emergency as determined by the EDO, and Director of Nuclear Reactor Regulation, Director of Nuclear Material Safety and Safeguards, Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support or the Deputy's designee, and Director, Office of the Controller, as appropriate may institute a proceeding to modify, suspend, or revoke a license or for such other action as may be proper by serving on the licensee an order to show cause which will:

(1) Allege the violations with which the licensee is charged, or the potentially hazardous conditions or other facts deemed to be sufficient ground for the proposed action;

(2) Provide that the licensee may file a written answer to the order under oath or affirmation within twenty (20) days of its date, or such other time as may be specified in the order;

(3) Inform the licensee of his right, within twenty (20) days of that date of the order, or such other time as may be specified in the order, to demand a hearing;

(4) Specify the issues; and

(5) State the effective date of the order.

(b) A licensee may respond to an order to show cause by filing a written answer under oath or affirmation. The answer shall specifically admit or deny each allegation or charge made in the order to show cause, and may set forth the matters of fact and law on which the licensee relies. The answer may demand a hearing.

(c) If the answer demands a hearing, the Commission will issue an order designating the time and place of hearing.

(d) An answer or stipulation may consent to the entry of an order in substantially the form proposed in the order to show cause.

(e) The consent of the licensee to the entry of an order shall constitute a waiver by the licensee of a hearing, findings of fact and conclusions of law, and of all right to seek Commission and judicial review or to contest the validity of the order in any forum. The order shall have the same force and effect as an order made after hearing by a presiding officer or the Commission.

(f) When the Executive Director for Operations, during an emergency as determined by the EDO, or the Director of Nuclear Reactor Regulation, Director of Nuclear Material Safety and Safeguards, Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support, or the Deputy's designee, as appropriate, finds that the public health, safety, or interest so requires or that the violation is willful, the order to show cause may provide, for stated reasons, that the proposed action be temporarily effective pending further order.

[27 FR 377, Jan. 13, 1962, as amended at 28 FR 10153, Sept. 17, 1963; 43 FR 16446, Apr. 19, 1978; 45 FR 3250, Jan. 17, 1980; 52 FR 31608, Aug. 21, 1987; 54 FR 53315, Dec. 28, 1989]

§ 2.203 Settlement and compromise.

At any time after the issuance of an order designating the time and place of hearing in a proceeding to modify, suspend, or revoke a license or for other action, the staff and a licensee or other person may enter into a stipulation for the settlement of the proceeding or the compromise of a civil penalty. The stipulation or compromise shall be subject to approval by the designated presiding officer or, if none has been designated, by the Chief Administrative Law Judge, according due weight to the position of the staff. The presiding officer, or if none has been designated, the Chief Administrative Law Judge, may order such adjudication of the issues as he may deem to be required in the public interest to dispose of the proceeding. If approved, the terms of the settlement or compromise shall be embodied in a decision or order settling and discontinuing the proceeding.

[36 FR 16896, Aug. 26, 1971]

§ 2.204 Order for modification of license.

The Commission may modify a license by issuing an amendment on notice to the licensee that the licensee may demand a hearing with respect to all or any part of the amendment within twenty (20) days from the date of the notice or such longer period as the notice may provide. The amendment will become effective on the expiration of the 20-day period during which the licensee may demand a hearing. If the licensee requests a hearing during this 20-day period, the amendment will become effective on the date specified in an order made following the hearing. When the Commission finds that the public health, safety, or interest so requires, the order may be made immediately effective. If the amendment involves a backfit, the provisions of § 50.109 of this chapter shall be followed.

[50 FR 38113, Sept. 20, 1985]

§ 2.205 Civil penalties.

(a) Before instituting any proceeding to impose a civil penalty under section 234 of the Act, the Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support, or the Deputy's designee, as appropriate, shall serve a written notice of violation upon the person charged. This notice may be included in a notice issued pursuant to § 2.201. The notice of violation shall specify the date or dates, facts, and the nature of the alleged act or omission with which the person is charged, and shall indentify specifically the particular provision or provisions of the law, rule, regulation, license, permit, or cease and desist order involved in the alleged violation and must state the amount of each proposed penalty. The notice of violation shall also advise the person charged that the civil penalty may be paid in the amount specified therein, or the proposed imposition of the civil penalty may be protested in its entirety or in part, by a written answer, either denying the violation or showing extenuating circumstances. The notice of violation shall advise the person charged that upon failure to pay a civil penalty subsequently determined by the Commission, if any, unless compromised, remitted, or mitigated, be collected by civil action, pursuant to section 234c of the Act.

(b) Within twenty (20) days of the date of a notice of violation or other time specified in the notice, the person charged may either pay the penalty in the amount proposed or answer the notice of violation. The answer to the notice of violation shall state any facts, explanations, and arguments, denying the charges of violation, or demonstrating any extenuating circumstances, error in the notice of violation, or other reason why the penalty should not be imposed and may request remission or mitigation of the penalty.

(c) If the person charged with violation fails to answer within the time specified in paragraph (b) of this section, an order may be issued imposing the civil penalty in the amount set forth in the notice of violation described in paragraph (a) of this section.

(d) If the person charged with violation files an answer to the notice of violation, the Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support, or the Deputy's designee, upon consideration of the answer, will issue an order dismissing the proceeding or imposing, mitigating, or remitting the civil penalty. The person charged may, within twenty (20) days of the date of the order or other time specified in the order, request a hearing.

(e) If the person charged with violation requests a hearing, the Commission will issue an order designating the time and place of hearing.

(f) If a hearing is held, an order will be issued after the hearing by the presiding officer or the Commission dismissing the proceeding or imposing, mitigating, or remitting the civil penalty.

(g) The Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support, or the Deputy's designee, as appropriate may compromise any civil penalty, subject to the provisions of § 2.203.

(h) If the civil penalty is not compromised, or is not remitted by the Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support, or the Deputy's designee, as appropriate, the presiding officer, or the Commission, and if payment is not made within ten (10) days following either the service of the order described in paragraph (c) or (f) of this section, or the expiration of the time for requesting a hearing described in paragraph (d) of this section, the Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support, or the Deputy's designee, as appropriate, may refer the matter to the Attorney General for collection.

(i) Except when payment is made after compromise or mitigation by the Department of Justice or as ordered by a court of the United States, following reference of the matter to the Attorney General for collection, payment of civil penalties imposed under section 234 of the Act shall be made by check, draft, or money order payable to the Treasurer of the United States, and mailed to the Director, Office of Enforcement.

[36 FR 16896, Aug. 26, 1971, as amended at 52 FR 31608, Aug. 21, 1987; 54 FR 53315, Dec. 28, 1989]

§ 2.206 Requests for action under this subpart.

(a) Any person may file a request to institute a proceeding pursuant to § 2.202 to modify, suspend, or revoke a license, or for such other action as may be proper. Such a request shall be addressed to the Executive Director for Operations and shall be filed either (1) by delivery to the Public Document Room at 2120 L Street, NW., Washington, DC, or (2) by mail or telegram addessed to the Executive Director for Operations, U.S. Nuclear Regulatory Commission, Washington, DC 20555. The requests shall specify the action requested and set forth the facts that constitute the basis for the request. The Executive Director for Operations will refer the request to the Director of the NRC Office with responsibility for the subject matter of the request for appropriate action in accordance with paragraph (b) of this section.

(b) Within a reasonable time after a request pursuant to paragraph (a) of this section has been received, the Director of the NRC office with responsibility for the subject matter of the request shall either institute the requested proceeding in accordance with this subpart or shall advise the person who made the request in writing that no proceeding will be instituted in whole or in part, with respect to the request, and the reasons for the decision.

(c)(1) Director's decisions under this section will be filed with the Office of the Secretary. Within twenty-five (25) days after the date of the Director's decision under this section that no proceeding will be instituted or other action taken in whole or in part, the Commission may on its own motion review that decision, in whole or in part, to determine if the Director has abused his discretion. This review power does not limit in any way either the Commission's supervisory power over delegated staff actions or the Commission's power to consult with the staff on a formal or informal basis regarding institution of proceedings under this section.

(2) No petition or other request for Commission review of a Director's decision under this section will be entertained by the Commission.

[39 FR 12353, Apr. 5, 1974, as amended at 42 FR 36240, July 14, 1977; 45 FR 73466, Nov. 5, 1980; 52 FR 31608, Aug. 21, 1987; 53 FR 43419, Oct. 27, 1988]

Subpart C—[Reserved]

Subpart D—Additional Procedures Applicable to Proceedings for the Issuance of Licenses To Construct or Operate Nuclear Power Plants of Duplicate Design at Multiple Sites

SOURCE: 40 FR 2976, Jan. 17, 1975, unless otherwise noted.

§ 2.400 Scope of subpart.

This subpart describes procedures applicable to licensing proceedings which involve the consideration in hearings of a number of applications, filed by one or more applicants pursuant to Appendix N of Part 52 of this chapter, for licenses to construct and operate nuclear power reactors of essentially the same design to be located at different sites.

[40 FR 2976, Jan. 17, 1975, as amended at 54 FR 15398, Apr. 18, 1989]

§ 2.401 Notice of hearing on applications pursuant to Appendix N of Part 52 for construction permits.

(a) In the case of applications pursuant to Appendix N of Part 52 of this chapter for construction permits for nuclear power reactors of the type described in § 50.22 of this chapter, the Secretary will issue notices of hearing pursuant to § 2.104.

(b) The notice of hearing will also state the time and place of the hearings on any separate phase of the proceeding.

[40 FR 2976, Jan. 17, 1975, as amended at 54 FR 15398, Apr. 18, 1989]

§ 2.402 Separate hearings on separate issues; consolidation of proceedings.

(a) In the case of applications pursuant to Appendix N of Part 52 of this chapter for construction permits for nuclear power reactors of a type described in § 50.22 of this chapter, the Commission or the presiding officer may order separate hearings on particular phases of the proceeding, such as matters related to the acceptability of the design of the reactor, in the context of the site parameters postulated for the design; environmental matters; or antitrust aspects of the application.

(b) If a separate hearing is held on a particular phase of the proceeding, the Commission or presiding officers of each affected proceeding may, pursuant to § 2.716, consolidate for hearing on that phase two or more proceedings to consider common issues relating to the applications involved in the proceedings, if it finds that such action will be conducive to the proper dispatch of its business and to the ends of justice. In fixing the place of any such consolidated hearing due regard will be given to the convenience and necessity of the parties, petitioners for leave to intervene or the attorneys or representatives of such persons, and the public interest.

[40 FR 2976, Jan. 17, 1975, as amended at 43 FR 17801, Apr. 26, 1978; 54 FR 15398, Apr. 18, 1989]

§ 2.403 Notice of proposed action on applications for operating licenses pursuant to Appendix N of Part 52.

In the case of applications pursuant to Appendix N of Part 52 of this chapter for operating licenses for nuclear power reactors, if the Commission has not found that a hearing is in the public interest, the Director of Nuclear Reactor Regulation will, prior to acting thereon, cause to be published in the FEDERAL REGISTER, pursuant to § 2.105, a notice of proposed action with respect to each application as soon as practicable after the applications have been docketed.

[40 FR 2976, Jan. 17, 1975, as amended at 54 FR 15398, Apr. 18, 1989]

§ 2.404 Hearings on applications for operating licenses pursuant to Appendix N of Part 52.

If a request for a hearing and/or petition for leave to intervene is filed within the time prescribed in the notice of proposed action on an application for an operating license pursuant to Appendix N of Part 52 of this chapter with respect to a specific reactor(s) at a specific site and the Commission or an atomic safety and licensing board designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel has issued a notice of hearing or other appropriate order, the Commission or the atomic safety and licensing board may order separate hearings on particular phases of the proceeding and/or consolidate for hearing two or more proceedings in the manner described in § 2.402.

[40 FR 2976, Jan. 17, 1975, as amended at 54 FR 15398, Apr. 18, 1989]

§ 2.405 Initial decisions in consolidated hearings.

At the conclusion of any hearing held pursuant to this subpart, the presiding officer will render a partial initial decision which may be appealed pursuant to § 2.762. No construction permit or full power operating license will be issued until an initial decision has been issued on all phases of the hearing and all issues under the Act and the National Environmental Policy Act of 1969 appropriate to the proceeding have been resolved.

§ 2.406 Finality of decisions on separate issues.

Notwithstanding any other provision of this chapter, in a proceeding conducted pursuant to this subpart and Appendix N of Part 52 of this chapter, no matter which has been reserved for consideration in one phase of the hearing shall be considered at another phase of the hearing except on the basis of significant new information that substantially affects the conclusion(s) reached at the other phase or other good cause.

[40 FR 2976, Jan. 17, 1975, as amended at 54 FR 15398, Apr. 18, 1989]

§ 2.407 Applicability of other sections.

The provisions of Subparts A and G relating to construction permits and operating licenses apply, respectively, to construction permits and operating licenses subject to this subpart, except as qualified by the provisions of this subpart.

Subpart E—Additional Procedures Applicable to Proceedings for the Issuance of Licenses to Manufacture Nuclear Power Reactors To Be Operated at Sites Not Identified in the License Application and Related Licensing Proceedings

SOURCE: 38 FR 30252, Nov. 2, 1973, unless otherwise noted.

§ 2.500 Scope of subpart.

This subpart prescribes procedures applicable to licensing proceedings which involve the consideration in separate hearings of an application for a license to manufacture nuclear power reactors pursuant to Appendix M of Part 52 of this chapter, and applications for construction permits and operating licenses for nuclear power reactors which have been the subject of such an application for a license to manufacture such facilities (manufacturing license).

[40 FR 2976, Jan. 17, 1975, as amended at 54 FR 15398, Apr. 18, 1989]

§ 2.501 Notice of hearing on application pursuant to Appendix M of Part 52 for a license to manufacture nuclear power reactors.

(a) In the case of an application pursuant to Appendix M of Part 52 of this chapter for a license to manufacture nuclear power reactors of the type described in § 50.22 of this chapter to be operated at sites not identified in the license application, the Secretary will issue a notice of hearing to be published in the FEDERAL REGISTER at least thirty (30) days prior to the date set for hearing in the notice.[1] The notice shall be issued as soon as practicable after the application has been docketed. The notice will state:

(1) The time, place, and nature of the hearing and/or the prehearing conference;

(2) The authority within which the hearing is to be held;

(3) The matters of fact and law to be considered; and

(4) The time within which answers to the notice shall be filed.

(b) The issues stated in the notice of hearing pursuant to paragraph (a) of this section will not involve consideration of the particular sites at which any of the nuclear power reactors to be manufactured will be located and operated. Except as the Commission determines otherwise, the notice of hearing will state:

(1) That, if the proceeding is a contested proceeding, the presiding officer will consider the following issues:[2]

(i) Whether the applicant has described the proposed design of, and the site parameters postulated for, the reactor(s), including, but not limited to, the principal architectural and engineering criteria for the design, and has identified the major features or components incorporated therein for the protection of the health and safety of the public;

(ii) Whether such further technical or design information as may be required to complete the design report and which can reasonably be left for later consideration, will be supplied in a supplement to the design report;

(iii) Whether safety features or components, if any, which require research and development have been described by the applicant and the applicant has identified, and there will be conducted a research and development program reasonably designed to resolve any safety questions associated with such features or components;

(iv) Whether on the basis of the foregoing, there is reasonable assurance that (A) such safety questions will be satisfactorily resolved before any of the proposed nuclear power reactors are removed from the manufacturing site, and (B) taking into consideration the site criteria contained in Part 100 of this chapter, the proposed reactor(s) can be constructed and operated at sites having characteristics that fall within the site parameters postulated for the design of the reactor(s) without undue risk to the health and safety of the public;

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[1] The thirty (30) day requirement of this paragraph is not applicable to a notice of the time and place of hearing published by the presiding officer after the notice of hearing described in this section has been published.

[2] Issues (i) and (vi) are the issues pursuant to the Atomic Energy Act of 1954, as amended. Issue (vii) is the issue pursuant to the National Environmental Policy Act of 1969.

(v) Whether the applicant is technically and financially qualified to design and manufacture the proposed reactor(s);

(vi) Whether the issuance of a license for manufacture of the reactor(s) will be inimical to the common defense and security or to the health and safety of the public; and

(vii) Whether, in accordance with the requirements of Subpart A of Part 51 and Appendix M of Part 52 of this chapter, the license should be issued as proposed.

(2) That, if the proceeding is not a contested proceeding, the presiding officer will determine (i) without conducting a de novo evaluation of the application, whether the application and the record of the proceeding contain sufficient information, and the review of the application by the Commission's staff has been adequate to support affirmative findings on paragraphs (b)(1) (i) through (v) of this section and a negative finding on paragraph (b)(1)(vi) of this section proposed to be made and the issuance of the license to manufacture proposed by the Director of Nuclear Reactor Regulation, and (ii) whether the review conducted by the Commission pursuant to the National Environmental Policy Act (NEPA) has been adequate.

(3) That, regardless of whether the proceeding is contested or uncontested, the presiding officer will, in accordance with Subpart A of Part 51 and paragraph 3 of Appendix M of Part 52 of this chapter,

(i) Determine whether the requirements of section 102(2) (A), (C) and (E) of the National Environmental Policy Act and Subpart A of Part 51 of this chapter have been complied with in the proceeding;

(ii) Independently consider the final balance among conflicting factors contained in the record of the proceeding with a view to determining the appropriate action to be taken; and

(iii) Determine whether the manufacturing license should be issued, denied or appropriately conditioned to protect environmental values.

(c) The place of hearing on an application for a manufacturing license will be Washington, D.C., or such other location as the Commission deems appropriate.

[38 FR 30252, Nov. 2, 1973, as amended at 39 FR 26279, July 18, 1974; 39 FR 33202, Sept. 16, 1974; 49 FR 9401, Mar. 12, 1984; 54 FR 15398, Apr. 18, 1989; 54 FR 52342, Dec. 21, 1989]

§ 2.502 Notice of hearing on application for a permit to construct a nuclear power reactor manufactured pursuant to a Commission license issued pursuant to Appendix M of Part 52 of this chapter at the site at which the reactor is to be operated.

The issues stated for consideration in the notice of hearing on an application for a permit to construct a nuclear power reactor(s) which is the subject of an application for a manufacturing license pursuant to Appendix M of Part 52 of this chapter, will be those stated in § 2.104(b) and, in addition, whether the site on which the facility is to be operated falls within the postulated site parameters specified in the relevant application for a manufacturing license.

[40 FR 2976, Jan. 17, 1975, as amended at 54 FR 15398, Apr. 18, 1989]

§ 2.503 Finality of decisions on separate issues.

Notwithstanding any other provision of this chapter, no matter which has been resolved at an earlier stage of the licensing process which involves a manufacturing license, a permit to construct a reactor for which a manufacturing license is sought, a license to operate such a reactor, and any amendment to such permit or licenses shall be determined to be at issue in any subsequent state of the licensing process except on the basis of significant new information that substantially affects the conclusion(s) reached at the earlier stage or other good cause.

§ 2.504 Applicability of other sections.

The provisions of Subparts A and G relating to construction permits apply to manufacturing licenses subject to this subpart, with respect to matters of radiological health and safety, environmental protection, and the common defense and security, except that § 2.104 (a) and (b) do not apply to manufacturing licenses. The provisions of Subparts A and G relating to construction permits and operating licenses apply, respectively, to construction permits and operating licenses subject to this subpart, except as qualified by the provisions of this subpart.

Subpart F—Additional Procedures Applicable to Early Partial Decisions on Site Suitability Issues in Connection With an Application for a Permit To Construct Certain Utilization Facilities

SOURCE: 42 FR 22885, May 5, 1977, unless otherwise noted.

§ 2.600 Scope of subpart.

This subpart prescribes procedures applicable to licensing proceedings which involve an early submittal of site suitability information in accordance with § 2.101(a-1), and a hearing and early partial decision on issues of site suitability, in connection with an application for a permit to construct a utilization facility which is subject to § 51.20(b) of this chapter and is of the type specified in § 50.21(b) (2) or (3) or § 50.22 of this chapter or is a testing facility.

[49 FR 9401, Mar. 12, 1984]

§ 2.601 Applicability of other sections.

The provisions of Subparts A and G relating to applications for construction permits and proceedings thereon apply, respectively, to aplications and proceedings in accordance with this subpart, except as specifically provided otherwise by the provisions of this subpart.

§ 2.602 Filing fees.

Each application which contains a request for early review of site suitability issues under the procedures of this subpart shall be accompanied by any fee required by § 50.30(e) and Part 170 of this chapter.

§ 2.603 Acceptance and docketing of application for early review of site suitability issues.

(a) Each part of an application submitted in accordance with § 2.101(a-1) of this part will be initially treated as a tendered application. If it is determined that any one of the parts as described in § 2.101(a-1) is incomplete and not acceptable for processing, the Director of Nuclear Reactor Regulation will inform the applicant of this determination and the respects in which the document is deficient. Such a determination of completeness will generally be made within a period of thirty (30) days.

(b)(1) The Director of Nuclear Reactor Regulation will accept for docketing an application for a construction permit for a utilization facility which is subject to § 51.20(b) of this chapter and is of the type specified in § 50.21(b) (2) or (3) or § 50.22 or is a testing facility where part one of the application as described in § 2.101(a-1) is complete. Part one of any application will not be considered complete unless it contains proposed findings as required by § 2.101(a-1)(1)(i) and unless it describes the applicant's site selection process, specifies the extent to which that process involves the consideration of alternative sites, explains the relationship between that process and the application for early review of site suitability issues, and briefly describes the applicant's long-range plans for ultimate development of the site. Upon assignment of a docket number, the procedures in § 2.101(a) (3) and (4) relating to formal docketing and the submission and distribution of additional copies of the application shall be followed.

(2) Additional parts of the application will be docketed upon a determination by the Director of Nuclear Reactor Regulation that they are complete.

(c) If part one of the application is docketed, the Director of Nuclear Reactor Regulation will cause to be published in the FEDERAL REGISTER and send to the Governor or other appropriate official of the State in which the site is located, a notice of docketing of the application which states the purpose of the application, states the location of the proposed site, states that a notice of hearing will be published, requests comments within 120 days or such other time as may be specified on the initiation or outcome of an early site review from Federal, State, and local agencies and interested persons, and in the case of applications filed under section 103 of the Act, states that a person who wishes to have his views on the antitrust aspects of the application presented to the Attorney General for consideration shall submit such views in accordance with a subsequent notice that will be published in the FEDERAL REGISTER. In the case of a nuclear power reactor, such subsequent notice will be published following submission of the information required by § 50.33a.

[42 FR 22885, May 5, 1977, as amended at 49 FR 9401, Mar. 12, 1984]

§ 2.604 Notice of hearing on application for early review of site suitability issues.

(a) Where an applicant for a construction permit for a utilization facility subject to this subpart requests an early review and hearing and an early partial decision on issues of site suitability pursuant to § 2.101(a-1), the provisions in the notice of hearing setting forth the matters of fact and law to be considered, as required by § 2.104, shall be modified so as to relate only to the site suitability issue or issues under review.

(b) After docketing of part two of the application, as provided in §§ 2.101(a-1) and 2.603, a supplementary notice of hearing will be published pursuant to § 2.104 with respect to the remaining unresolved issues in the proceeding within the scope of § 2.104. Such supplementary notice of hearing will provide that any person whose interest may be affected by the proceeding and who desires to participate as a party in the resolution of the remaining issues shall file a petition for leave to intervene pursuant to § 2.714 within the time prescribed in the notice. Such supplementary notice will also provide appropriate opportunities for participation by a representative of an interested state under § 2.715(c) and for limited appearances pursuant to § 2.715(a).

(c) Any person who was permitted to intervene as a party pursuant to the initial notice of hearing on site suitability issues and who was not dismissed or did not withdraw as a party may continue to participate as a party to the proceeding with respect to the remaining unresolved issues, provided that within the time prescribed for filing of petitions for leave to intervene in the supplementary notice of hearing, he files a notice of his intent to continue as a party, along with a supporting affidavit identifying the specific aspect or aspects of the subject matter of the proceeding as to which he wishes to continue to participate as a party and setting forth with particularity the basis for his contentions with regard to each such aspect or aspects. A party who files a nontimely notice of intent to continue as a party may be dismissed from the proceeding, absent a determination that the party has made a substantial showing of good cause for failure to file on time, and with particular reference to the factors specified in §§ 2.714(a) (1) through (4) and 2.714(d). The notice will be ruled upon by the Commission or atomic safety and licensing board designated to rule on petitions for leave to intervene.

(d) To the maximum extent practicable, the membership of the atomic safety and licensing board designated to preside in the proceeding on the remaining unresolved issues pursuant to the supplemental notice of hearing will be the same as the membership designated to preside in the initial notice of hearing on site suitability issues.

§ 2.605 Additional considerations.

(a) The Commission will not conduct more than one review of site suitability issues with regard to a particular site prior to filing and review of part two of the application described in § 2.101(a-1) of this part.

(b) The Commission, upon its own initiative, or upon the motion of any party to the proceeding filed at least sixty (60) days prior to the date of the commencement of the evidentiary hearing on site suitability issues, may decline to initiate an early hearing or render an early partial decision on any issue or issues of site suitability:

(1) In cases where no partial decision on the relative merits of the proposed site and alternative sites under Subpart A of Part 51 is requested, upon determination that there is a reasonable likelihood that further review would identify one or more preferable alternative sites and the partial decision on one or more site suitability issues would lead to an irreversible and irretrievable commitment of resources prior to the submittal of the remainder of the information required by § 50.30(f) of this chapter that would prejudice the later review and decision on such alternative sites; or

(2) In cases where it appears that an early partial decision on any issue or issues of site suitability would not be in the public interest considering (i) the degree of likelihood that any early findings on those issues would retain their validity in later reviews, (ii) the objections, if any, of cognizant state or local government agencies to the conduct of an early review on those issues, and (iii) the possible effect on the public interest and the parties of having an early, if not necessarily conclusive, resolution of those issues.

[42 FR 22885, May 5, 1977, as amended at 49 FR 9401, Mar. 12, 1984]

§ 2.606 Partial decisions on site suitability issues.

(a) The provisions of §§ 2.754, 2.755, 2.760, 2.761, 2.762, 2.763, and 2.764(a) shall apply to any partial initial decision rendered in accordance with this subpart. Section 2.764(b) shall not apply to any partial initial decision rendered in accordance with this subpart. No limited work authorization may be issued pursuant to § 50.10(e) of Part 50 of this chapter and no construction permit may be issued without completion of the full review required by section 102(2) of the National Environmental Policy Act of 1969, as amended, and Subpart A of Part 51 of this chapter. The authority of the Commission and/or Appeal Board to review such a partial initial decision *sua sponte*, or to raise *sua sponte* an issue that has not been raised by the parties, will be exercised within the same time period as in the case of a full decision relating to the issuance of a construction permit.

(b)(1) A partial decision on one or more site suitability issues pursuant to the applicable provisions of Part 50, Subpart A of Part 51, and Part 100 of this chapter issued in accordance with this subpart shall (i) clearly identify the site to which the partial decision applies and (ii) indicate to what extent additional information may be needed and additional review may be required to enable the Commission to determine in accordance with the provisions of the Act and the applicable provisions of the regulations in this chapter whether a construction permit for a facility to be located on the site identified in the partial decision should be issued or denied.

(2) Following completion of Commission or Atomic Safety and Licensing Appeal Board review, as appropriate, of the partial initial decision of the Atomic Safety and Licensing Board, after hearing, on the site suitability issues, the partial decision shall remain in effect either for a period of five years or, where the applicant for the construction permit has made timely submittal of the information required to support the application as provided in § 2.101(a-1), until the proceeding for a permit to construct a facility on the site identified in the partial decision has been concluded,[1] unless the Commission, Atomic Safety and Licensing Appeal Board, or Atomic Safety and Licensing Board, upon its own initiative or upon motion by a party to the proceeding, finds that there exists significant new information that substantially affects the earlier conclusions and reopens the

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[1] The partial decision on site suitability issues shall be incorporated in the decision regarding issuance of a construction permit to the extent that it serves as a basis for the decision on a specific site issue(s).

hearing record on site suitability issues. Upon good cause shown, the Commission may extend the five year period during which a partial decision shall remain in effect for a reasonable period of time not to exceed one year.

[42 FR 22885, May 5, 1977, as amended at 49 FR 9401, Mar. 12, 1984]

Subpart G—Rules of General Applicability

§ 2.700 Scope of subpart.

The general rules of this subpart govern procedure in all adjudications initiated by the issuance of an order to show cause, an order pursuant to § 2.205(e), a notice of hearing, a notice of proposed action pursuant to section 2.105, or a notice issued pursuant to § 2.102(d)(3). The procedure applicable to the proceeding on an application for a license to receive and possess high-level radioactive waste at a geologic repository operations area are set forth in Subpart J.

[54 FR 14944, Apr. 14, 1989]

§ 2.700a Exceptions.

(a) Consistent with 5 U.S.C. 554(a)(4) of the Administrative Procedure Act, the Commission may provide alternative procedures in adjudications to the extent that there is involved the conduct of military or foreign affairs functions.

(b) This rule shall apply to proceedings in progress where hearings have already been requested or ordered as well as to future proceedings.

[47 FR 4493, Feb. 1, 1982]

§ 2.701 Filing of documents.

(a) Documents shall be filed with the Commission in adjudications subject to this part either:

(1) By delivery to the Public Document Room at 2120 L Street, NW., Washington, D.C., or

(2) by mail or telegram addressed to the Secretary, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Chief, Docketing and Service Section.

(b) All documents offered for filing shall be accompanied by proof of service upon all parties to the proceeding or their attorneys of record as required by law or by rule or order of the Commission. The staff of the Commission shall be deemed to be a party.

(c) Filing by mail or telegram will be deemed to be complete as of the time of deposit in the mail or with a telegraph company.

[27 FR 377, Jan. 13, 1962, as amended at 29 FR 12830, Sept. 11, 1964; 33 FR 6708, May 2, 1968; 39 FR 35332, Oct. 1, 1974; 53 FR 43419, Oct. 27, 1988]

§ 2.702 Docket.

The Secretary will maintain a docket for each proceeding subject to this part, commencing with the issuance of the initial notice of hearing, notice of consideration of issuance of facility operating license or other proposed action specified in § 2.105, or order to show cause. The Secretary will maintain all files and records, including the transcripts of testimony and exhibits and all papers, correspondence, decisions and orders filed or issued.

[29 FR 12830, Sept. 11, 1964, as amended at 37 FR 28711, Dec. 29, 1972]

§ 2.703 Notice of hearing.

(a) In a proceeding in which the terms of a notice of hearing are not otherwise prescribed by this part, the order or notice of hearing will state:

(1) The nature of the hearing, and its time and place, or a statement that the time and place will be fixed by subsequent order;

(2) The legal authority and jurisdiction under which the hearing is to be held;

(3) The matters of fact and law asserted or to be considered; and

(4) The time within which an answer shall be filed.

(b) The time and place of hearing will be fixed with due regard for the convenience of the parties or their representatives, the nature of the proceeding, and the public interest.

§ 2.704 Designation of presiding officer, disqualification, unavailability.

(a) The Commission may provide in the notice of hearing that one or more members of the Commission, or an atomic safety and licensing board, or a named officer who has been delegated final authority in the matter, shall preside. If the Commission does not so provide, the Chairman of the Atomic Safety and Licensing Board Panel will issue an order designating an atomic safety and licensing board appointed pursuant to section 191 of the Atomic Energy Act of 1954, as amended, or, if the Commission has not provided for the hearing to be conducted by an atomic safety and licensing board, the Chief Administrative Law Judge will issue an order designating an administrative law judge appointed pursuant to section 3105 of Title 5 of the United States Code.

(b) If a designated presiding officer or a designated member of an atomic safety and licensing board deems himself disqualified to preside or to participate as a board member in the hearing, he shall withdraw by notice on the record and shall notify the Commission or the Chairman of the Atomic Safety and Licensing Board Panel, as appropriate, of his withdrawal.

(c) If a party deems the presiding officer or a designated member of an atomic safety and licensing board to be disqualified, he may move that the presiding officer or the board member disqualify himself. The motion shall be supported by affidavits setting forth the alleged grounds for disqualification. If the presiding officer does not grant the motion or the board member does not disqualify himself, the motion shall be referred to the Commission or the Atomic Safety and Licensing Appeal Board, as appropriate, which will determine the sufficiency of the grounds alleged.

(d) If a presiding officer or a designated member of an atomic safety and licensing board becomes unavailable during the course of a hearing, the Commission or the Chairman of the Atomic Safety and Licensing Board Panel, as appropriate, will designate another presiding officer or atomic safety and licensing board member. If he becomes unavailable after the hearing has been concluded:

(1)(i) The Commission may designate another presiding officer to make the decision; or

(ii) The Chairman of the Atomic Safety and Licensing Board Panel or the Commission, as appropriate, may designate another atomic safety and licensing board member to participate in the decision;

(2) The Commission may direct that the record be certified to it for decision, except in adjudications in which exceptions to the initial decision may be taken to the Atomic Safety and Licensing Appeal Board; or

(3) The Commission may designate another presiding officer.

(e) In the event of substitution of a presiding officer or a designated member of an atomic safety and licensing board for the one originally designated, any motion predicated upon the substitution shall be made within five (5) days thereafter.

[27 FR 377, Jan. 13, 1962, as amended at 31 FR 16310, Dec. 21, 1966; 35 FR 11459, July 17, 1970; 35 FR 12649, Aug. 8, 1970; 40 FR 51996, Nov. 7, 1975; 40 FR 53379, Nov. 18, 1975]

§ 2.705 Answer.

(a) Within twenty (20) days after service of the notice of hearing, or such other time as may be specified in the notice of hearing, a party may file an answer which shall concisely state:

(1) The nature of his defense or other position;

(2) The items of the specification of issues he controverts and those he does not controvert; and

(3) Whether he proposes to appear and present evidence.

(b) If facts are alleged in the specification of issues, the answer shall admit or deny specifically each material allegation of fact; or, where the party has no knowledge or information sufficient to form a belief, the answer may so state and the statement shall have the effect of a denial. Material allegations of fact not denied shall be deemed to be admitted. Matters alleged as affirmative defenses or positions shall be separately stated and identified and, in the absence of a reply, shall be deemed to be controverted.

(c) If a party does not oppose an order or proposed action embodied in or accompanying the notice of hearing, or does not wish to appear and present evidence at the hearing, the answer shall so state. In lieu of appearing at the hearing, a party may request leave to file a statement under oath or affirmation of reasons why the proposed order or action should not be issued or should differ from that proposed. Such a statement, if accepted, will be accorded whatever weight is deemed proper.

§ 2.706 Reply.

A party may file a reply to an answer within ten (10) days after it is served.

[27 FR 377, Jan. 13, 1962, as amended at 43 FR 17801, Apr. 26, 1978]

§ 2.707 Default.

On failure of a party to file an answer or pleading within the time prescribed in this part or as specified in the notice of hearing or pleading; to appear at a hearing or prehearing conference, to comply with any prehearing order entered pursuant to § 2.751a or § 2.752, or to comply with any discovery order entered by the presiding officer pursuant to § 2.740, the Commission or the presiding officer[1] may make such orders in regard to the failure as are just, including, among others, the following:

(a) Without further notice, find the facts as to the matters regarding which the order was made in accordance with the claim of the party obtaining the order, and enter such order as may be appropriate; or

(b) Proceed without further notice to take proof on the issues specified.

[37 FR 15131, July 28, 1972]

§ 2.708 Formal requirements for documents.

(a) Each document filed in an adjudication subject to this part to which a docket number has been assigned shall bear the docket number and title of the proceeding.

(b) Each document shall be bound on the left side and typewritten, printed or otherwise reproduced in permanent form on good unglazed paper of standard letterhead size. Each page shall begin not less than one and one-quarter inches from the top, with side and bottom margins of not less than one and one-quarter inches. Text shall be double-spaced, except that quotations may be single-spaced and indented. The requirements of this paragraph do not apply to original documents or admissible copies offered as exhibits, or to specially prepared exhibits.

(c) The original of each document shall be signed in ink by the party or his authorized representative, or by an attorney having authority with respect to it. The capacity of the person signing, his address, and the date shall be stated. The signature of a person signing in a representative capacity is a representation that the document has been subscribed in the capacity specified with full authority, that he has read it and knows the contents, that to the best of his knowledge, information, and belief the statements made in it are true, and that it is not interposed for delay. If a document is not signed, or is signed with intent to defeat the purpose of this section, it may be stricken.

(d) Except as otherwise provided by this part or by order, a pleading (or other document) other than correspondence shall be filed in an original and two conformed copies.

(e) The first document filed by any person in a proceeding shall designate the name and address of a person on whom service may be made.

(f) A document filed by telegraph need not comply with the formal requirements of paragraphs (b), (c), and (d) of this section if an original and copies otherwise complying with all of the requirements of this section are mailed within two (2) days thereafter to the Secretary, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Chief, Docketing and Service Section.

[27 FR 377, Jan. 13, 1962, as amended at 28 FR 10153, Sept. 17, 1963; 33 FR 6708, May 5,

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[1] When a reference is made to the Commission or the presiding officer in this subpart and a presiding officer has been designated, the specified action will be taken by the presiding officer, unless otherwise provided.

1968; 39 FR 35332, Oct. 1, 1974; 45 FR 49537, July 25, 1980]

§ 2.709 Acceptance for filing.

A document which fails to conform to the requirements of § 2.708 may be refused acceptance for filing and may be returned with an indication of the reason for nonacceptance. Any matter so tendered but not accepted for filing shall not be entered on the Commission's docket.

§ 2.710 Computation of time.

In computing any period of time, the day of the act, event, or default after which the designated period of time begins to run is not included. The last day of the period so computed is included unless it is a Saturday, Sunday, or legal holiday at the place where the action or event is to occur, in which event the period runs until the end of the next day which is neither a Saturday, Sunday, nor holiday. Whenever a party has the right or is required to do some act within a prescribed period after the service of a notice or other paper upon him or her and the notice or paper is served upon by mail, five (5) days shall be added to the prescribed period. Only two (2) days shall be added when a document is served by express mail.

[46 FR 58281, Dec. 1, 1981]

§ 2.711 Extension and reduction of time limits.

(a) Except as otherwise provided by law, whenever an act is required or allowed to be done at or within a specified time, the time fixed or the period of time prescribed may for good cause be extended or shortened by the Commission or the presiding officer, or by stipulation approved by the Commission or the presiding officer.

(b) In any instance in which this part does not prescribe a time limit for an action to be taken in the proceeding, the Commission or the presiding officer may set a time limit for that action.

[37 FR 15131, July 28, 1972]

§ 2.712 Service of papers, methods, proof.

(a) *Service of papers by the Commission.* Except for subpoenas, the Commission will serve all orders, decisions, notices, and other papers issued by it upon all parties.

(b) *Who may be served.* Any paper required to be served upon a party shall be served upon him or upon the representative designated by him or by law to receive service of papers. When a party has appeared by attorney, service must be made upon the attorney of record.

(c) *How service may be made.* Service may be made by personal delivery, by first class, certified or registered mail including air mail, by telegraph, or as otherwise authorized by law. Where there are numerous parties to a proceeding, the Commission may make special provision regarding the service of papers. The presiding officer may require service by express mail upon some or all parties and the presiding officer.

(d) *Service on the Secretary.* (1) All pleadings must be served on the Secretary of the Commission in the same or equivalent manner, *i.e.*, telefax, express mail, personal delivery, or courier, that they are served upon the adjudicatory tribunals and the parties to the proceedings so that the Secretary will receive the pleading at approximately the same time that it is received by the tribunal to which the pleading is directed.

(2) When pleadings are personally delivered to tribunals while they are conducting proceedings outside the Washington, DC area, service on the Secretary may be accomplished by overnight mail.

(3) Service of pre-filed testimony and demonstrative evidence (*e.g.*, maps and other physical exhibits) on the Secretary may be made by first-class mail in all cases.

(4) The addresses for the Secretary are:

(i) First class mail: Office of the Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Service Branch.

(ii) Express mail: Office of the Secretary, Sixteenth Floor, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852, Attention: Docketing and Service Branch.

(iii) Telecopier: (301) 492-1672; (301) 492-0275; and (301) 492-1977 (verification).

(e) *When service complete.* Service upon a party is complete:

(1) By personal delivery, on handing the paper to the individual, or leaving it at his office with his clerk or other person in charge or, if there is no one in charge, leaving it in a conspicuous place therein or, if the office is closed or the person to be served has no office, leaving it at his usual place of residence with some person of suitable age and discretion then residing there;

(2) By telegraph, when deposited with a telegraph company, properly addressed and with charges prepaid;

(3) By mail, on deposit in the United States mail, properly stamped and addressed; or

(4) When service cannot be effected in a manner provided by paragraphs (d)(1) to (3) inclusive of this section in any other manner authorized by law.

(f) *Proof of service.* Proof of service, stating the name and address of the person on whom served and the manner and date of service, shall be shown for each document filed, and may be made by:

(1) Written acknowledgment of the party served or his counsel;

(2) The certificate of counsel if he has made the service; or

(3) The affidavit of the person making the service.

(g) *Free copying and service.* Except in an antitrust proceeding, in any adjudicatory proceeding on an application for a license or an amendment thereto, the Commission, upon request by a party other than the applicant, will copy and serve without cost to that party that party's testimony (including attachments), proposed findings of fact and conclusions of law, and responses to discovery requests. These documents should be filed with Docketing and Service not less than five days before they are due to be submitted to an adjudicatory board, unless the presiding officer provides otherwise. [1]

[27 FR 377, Jan. 13, 1962, as amended at 28 FR 10153, Sept. 17, 1963; 31 FR 4390, Mar. 15, 1966; 45 FR 49537, July 25, 1980; 46 FR 13681, Feb. 24, 1981; 46 FR 58281, Dec. 1, 1981; 54 FR 26731, June 26, 1989; 54 FR 29008, July 11, 1989]

§ 2.713 Appearance and practice before the Commission in adjudicatory proceedings.

(a) *Standards of practice.* In the exercise of their functions under this subpart, the Commission, the Atomic Safety and Licensing Appeal Boards, the Atomic Safety and Licensing Boards, and Administrative Law Judges function in a quasijudicial capacity. Accordingly, parties and their representatives in proceedings subject to this subpart are expected to conduct themselves with honor, dignity, and decorum as they should before a court of law.

(b) *Representation.* A person may appear in an adjudication on his or her own behalf or by an attorney-at-law. A partnership, corporation or unincorporated association may be represented by a duly authorized member or officer, or by an attorney-at-law. A party may be represented by an attorney-at-law provided the attorney is in good standing and has been admitted to practice before any Court of the United States, the District of Columbia, or the highest court of any State, territory, or possession of the United States. Any person appearing in a representative capacity shall file with the Commission a written notice of appearance which shall state his or her name, address, and telephone number; the name and address of the person on whose behalf he or she appears; and, in the case of an attorney-at-law, the basis of his or her eligibility as a representative or, in the case of another representative, the basis of his or her authority to act on behalf of the party.

(c) *Reprimand, censure or suspension from the proceeding.* (1) A presiding officer, an Atomic Safety and Licensing Appeal Board, or the Commission may, if necessary for the orderly conduct of a proceeding, reprimand, censure or suspend from participation in the particular proceeding pending before it any party or representative of a party who shall refuse to comply with its directions, or who shall be guilty of disorderly, disruptive, or contemptuous conduct.

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[1] This paragraph is suspended until further action of the Commission. (See 46 FR 13681, Feb. 24, 1981)

(2) A reprimand, a censure or a suspension which is ordered to run for one day or less shall be ordered with grounds stated on the record of the proceeding and shall advise the person disciplined of the right to appeal pursuant to paragraph (c)(3) of this section. A suspension which is ordered for a longer period shall be in writing, shall state the grounds on which it is based, and shall advise the person suspended of the right to appeal and to request a stay pursuant to paragraphs (c)(3) and (c)(4) of this section. A proceeding may be stayed for a reasonable time in order for an affected party to obtain other representation if this would be necessary to prevent injustice.

(3) Anyone disciplined pursuant to this section may within ten (10) days after issuance of the order file an appeal with the Atomic Safety and Licensing Appeal Board or the Commission, as appropriate. The appeal shall be in writing and state concisely, with supporting argument, why the appellant believes the order was erroneous, either as a matter of fact or law. The Appeal Board or Commission, as appropriate, shall consider each appeal on the merits, including appeals in cases in which the suspension period has already run. If necessary for a full and fair consideration of the facts, the Appeal Board or Commission, as appropriate, may conduct further evidentiary hearings, or may refer the matter to another presiding officer for development of a record. In the latter event, unless the Appeal Board or the Commission, as appropriate, provides specific directions to the presiding officer, that officer shall determine the procedure to be followed and who shall present evidence, subject to applicable provisions of law. Such hearing shall commence as soon as possible. In the case of an attorney, if no appeal is taken of a suspension, or, if the suspension is upheld at the conclusion of the appeal, the presiding officer, the Appeal Board, or the Commission, as appropriate, shall notify the state bar(s) to which the attorney is admitted. Such notification shall include copies of the order of suspension, and, if an appeal was taken, briefs of the parties, and the decision of the Appeal Board or Commission.

(4) A suspension exceeding 1 day shall not be effective for 72 hours from the date the suspension order is issued. Within this time a suspended individual may request a stay of the sanction from the appropriate reviewing tribunal pending appeal. No responses to the stay request from other parties will be entertained. If a timely stay request is filed, the suspension shall be stayed until the reviewing tribunal rules on the motion. The stay request shall be in writing and contain the information specified in § 2.788(b) (1), (2) and (4) of this part. The Appeal Board or Commission, as appropriate, shall rule on the stay request within 10 days after the filing of the motion. The Appeal Board or Commission shall consider the factors specified in § 2.788(e) (1) and (2) of this part is determining whether to grant or deny a stay application.

[45 FR 69878, Oct. 22, 1980]

§ 2.714 Intervention.

(a)(1) Any person whose interest may be affected by a proceeding and who desires to participate as a party shall file a written petition for leave to intervene. In a proceeding noticed pursuant to § 2.105, any person whose interest may be affected may also request a hearing. The petition and/or request shall be filed not later than the time specified in the notice of hearing, or as provided by the Commission, the presiding officer or the Atomic Safety and Licensing Board designated to rule on the petition and/or request, or as provided in § 2.102(d)(3). Nontimely filings will not be entertained absent a determination by the Commission, the presiding officer or the Atomic Safety and Licensing Board designated to rule on the petition and/or request, that the petition and/or request should be granted based upon a balancing of the following factors in addition to those set out in paragraph (d)(1) of this section:

(i) Good cause, if any, for failure to file on time.

(ii) The availability of other means whereby the petitioner's interest will be protected.

(iii) The extent to which the petitioner's participation may reasonably be expected to assist in developing a sound record.

(iv) The extent to which the petitioner's interest will be represented by existing parties.

(v) The extent to which the petitioner's participation will broaden the issues or delay the proceeding.

(2) The petition shall set forth with particularity the interest of the petitioner in the proceeding, how that interest may be affected by the results of the proceeding, including the reasons why petitioner should be permitted to intervene, with particular reference to the factors in paragraph (d)(1) of this section, and the specific aspect or aspects of the subject matter of the proceeding as to which petitioner wishes to intervene.

(3) Any person who has filed a petition for leave to intervene or who has been admitted as a party pursuant to this section may amend his petition for leave to intervene. A petition may be amended without prior approval of the presiding officer at any time up to fifteen (15) days prior to the holding of the special prehearing conference pursuant to § 2.751a, or where no special prehearing conference is held, fifteen (15) days prior to the holding of the first prehearing conference. After this time a petition may be amended only with approval of the presiding officer, based on a balancing of the factors specified in paragraph (a)(1) of this section. Such an amended petition for leave to intervene must satisfy the requirements of this paragraph (a) of this section pertaining to specificity.

(b)(1) Not later than fifteen (15) days prior to the holding of the special prehearing conference pursuant to § 2.751a, or if no special prehearing conference is held, fifteen (15) days prior to the holding of the first prehearing conference, the petitioner shall file a supplement to his or her petition to intervene that must include a list of the contentions which petitioner seeks to have litigated in the hearing. A petitioner who fails to file a supplement that satisfies the requirements of paragraph (b)(2) of this section with respect to at least one contention will not be permitted to participate as a party. Additional time for filing the supplement may be granted based upon a balancing of the factors in paragraph (a)(1) of this section.

(2) Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide the following information with respect to each contention:

(i) A brief explanation of the bases of the contention.

(ii) A concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing, together with references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion.

(iii) Sufficient information (which may include information pursuant to paragraphs (b)(2)(i) and (ii) of this section) to show that a genuine dispute exists with the applicant on a material issue of law or fact. This showing must include references to the specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief. On issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant's environmental report. The petitioner can amend those contentions or file new contentions if there are data or conclusions in the NRC draft or final environmental impact statement, environmental assessment, or any supplements relating thereto, that differ significantly from the data or conclusions in the applicant's document.

(c) Any party to a proceeding may file an answer to a petition for leave to intervene or a supplement thereto within ten (10) days after service of the petition or supplement, with particular attention to the factors set forth in paragraph (d)(1) of this section. The staff may file such an answer within fifteen (15) days after service of the petition or supplement.

(d) The Commission, the presiding officer, or the Atomic Safety and Licensing Board designated to rule on petitions to intervene and/or requests for hearing shall permit intervention, in any hearing on an application for a license to receive and possess high-level radioactive waste at a geologic repository operations area, by the State in which such area is located and by any affected Indian Tribe as defined in part 60 of this chapter. In all other circumstances, such ruling body or officer shall, in ruling on--

(1) A petition for leave to intervene or a request for a hearing, consider the following factors, among other things:

(i) The nature of the petitioner's right under the Act to be made a party to the proceeding.

(ii) The nature and extent of the petitioner's property, financial, or other interest in the proceeding.

(iii) The possible effect of any order that may be entered in the proceeding on the petitioner's interest.

(2) The admissibility of a contention, refuse to admit a contention if:

(i) The contention and supporting material fail to satisfy the requirements of paragraph (b)(2) of this section; or

(ii) The contention, if proven, would be of no consequence in the proceeding because it would not entitle petitioner to relief.

(e) If the Commission or the presiding officer determines that any of the admitted contentions constitute pure issues of law, those contentions must be decided on the basis of briefs or oral argument according to a schedule determined by the Commission or presiding officer.

(f) An order permitting intervention and/or directing a hearing may be conditioned on such terms as the Commission, presiding officer or the designated atomic safety and licensing board may direct in the interests of:

(1) Restricting irrelevant, duplicative, or repetitive evidence and argument,

(2) Having common interests represented by a spokesman, and

(3) Retaining authority to determine priorities and control the compass of the hearing.

(g) In any case in which, after consideration of the factors set forth in paragraph (d)(1) of this section, the Commission or the presiding officer finds that the petitioner's interest is limited to one or more of the issues involved in the proceeding, any order allowing intervention shall limit his participation accordingly.

(h) A person permitted to intervene becomes a party to the proceeding, subject to any limitations imposed pursuant to paragraph (f) of this section.

(i) Unless otherwise expressly provided in the order allowing intervention, the granting of a petition for leave to intervene does not change or enlarge the issues specified in the notice of hearing.

(j) The provisions of this section do not apply to license applications docketed under subpart J of this part.

[37 FR 15132, July 28, 1972, as amended at 37 FR 28711, Dec. 29, 1972; 39 FR 17972, May 22, 1974; 43 FR 17801, Apr. 26, 1978; 44 FR 4459, Jan. 22, 1979; 51 FR 27162, July 30, 1986; 54 FR 14944, Apr. 14, 1989; 54 FR 23740, June 2, 1989; 54 FR 33180, Aug. 11, 1989; 54 FR 39728, Sept. 28, 1989]

§ 2.714a Appeals from certain rulings on petitions for leave to intervene and/or requests for hearing.

(a) Notwithstanding the provisions of § 2.730(f), an order of the presiding officer or the atomic safety and licensing board designated to rule on petitions for leave to intervene and/or requests for hearing may be appealed, in accordance with the provisions of this section, to the Atomic Safety and Licensing Appeal Board within ten (10) days after service of the order. The appeal shall be asserted by the filing of a notice of appeal and accompanying supporting brief. Any other party may file a brief in support of or in opposition to the appeal within ten (10) days after service of the appeal. No other appeals from rulings on petitions and/or requests for hearing shall be allowed.

(b) An order wholly denying a petition for leave to intervene and/or request for a hearing is appealable by the petitioner on the question whether the petition and/or hearing request should have been granted in whole or in part.

(c) An order granting a petition for leave to intervene and/or request for a hearing is appealable by a party other than the petitioner on the question whether the petition and/or the request for a hearing should have been wholly denied.

[37 FR 28711, Dec. 29, 1972, as amended at 43 FR 17802, Apr. 26, 1978]

§ 2.715 Participation by a person not a party.

(a) A person who is not a party may, in the discretion of the presiding officer, be permitted to make a limited appearance by making oral or written statement of his position on the issues at any session of the hearing or any prehearing conference within such limits and on such conditions as may be fixed by the presiding officer, but he may not otherwise participate in the proceeding.

(b) The Secretary will give notice of a hearing to any person who requests it prior to the issuance of the notice of hearing, and will furnish a copy of the notice of hearing to any person who requests it thereafter. When a communication bears more than one signature, the Commission will give the notice to the person first signing unless the communication clearly indicates otherwise.

(c) The presiding officer will afford representatives of an interested State, county, municipality, and/or agencies thereof, a reasonable opportunity to participate and to introduce evidence, interrogate witnesses, and advise the Commission without requiring the representative to take a position with respect to the issue. Such participants may also file proposed findings and exceptions pursuant to §§ 2.754 and 2.762 and petitions for review by the Commission pursuant to § 2.786. The presiding officer may require such representative to indicate with reasonable specificity, in advance of the hearing, the subject matters on which he desires to participate.

(d) If a matter is taken up by the Appeal Board on appeal or sua sponte or by the Commission pursuant to § 2.786 or sua sponte, a person who is not a party may, in the discretion of the Appeal Board or the Commission, respectively, be permitted to file a brief "amicus curiae". A person who is not a party and desires to file a brief must submit a motion for leave to do so which identifies the interest of the person and states the reasons why a brief is desirable. Except as otherwise provided by the Commission or the Appeal Board, such brief must be filed within the time allowed to the party whose position the brief will support. A motion of a person who is not a party to participate in oral argument before an Appeal Board or the Commission will be granted at the discretion of the Appeal Board or the Commission.

[27 FR 377, Jan. 13, 1962, as amended at 28 FR 10153, Sept. 17, 1963; 43 FR 17802, Apr. 26, 1978]

§ 2.715a Consolidation of parties in construction permit or operating license proceedings.

On motion or on its or his own initiative, the Commission or the presiding officer may order any parties in a proceeding for the issuance of a construction permit or an operating license for a production or utilization facility who have substantially the same interest that may be affected by the proceeding and who raise substantially the same questions, to consolidate their presentation of evidence, cross-examination, briefs, proposed findings of fact, and conclusions of law and argument. However, it may not order any consolidation that would prejudice the rights of any party. A consolidation under this section may be for all purposes of the proceeding, all of the issues of the proceeding, or with respect to any one or more issues thereof.

[37 FR 15132, July 28, 1972]

§ 2.716 Consolidation of proceedings.

On motion and for good cause shown or on its own initiative, the Commission or the presiding officers of each affected proceeding may consolidate for hearing or for other purposes two or more proceedings, or may hold joint hearings with interested States and/or other federal agencies on matters of concurrent jurisdiction, if it is found that such action will be conducive to the proper dispatch of its business and to the ends of justice and will be conducted in accordance with the other provisions of this subpart.

[43 FR 17802, Apr. 26, 1978]

§ 2.717 Commencement and termination of jurisdiction of presiding officer.

(a) Unless otherwise ordered by the Commission, the jurisdiction of the presiding officer designated to conduct a hearing over the proceeding, including motions and procedural matters, commences when the proceeding commences. If no presiding officer has been designated, the Chief Administrative Law Judge has such jurisdiction or, if he is unavailable, another administrative law judge has such jurisdiction. A proceeding is deemed to commence when a notice of hearing or a notice of proposed action pursuant to § 2.105 is issued. When a notice of hearing provides that the presiding officer is to be an administrative law judge, the Chief Administrative Law Judge will designate by order the administrative law judge who is to preside. The presiding officer's jurisdiction in each proceeding will terminate upon the expiration of the period within which the Commission may direct that the record be certified to it for final decision, or when the Commission renders a final decision, or when the presiding officer shall have withdrawn himself from the case upon considering himself disqualified, whichever is earliest.

(b) The Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, may issue an order and take any otherwise proper administrative action with respect to a licensee who is a party to a pending proceeding. Any order related to the subject matter of the pending proceeding may be modified by the presiding officer as appropriate for the purpose of the proceeding.

[28 FR 10153, Sept. 17, 1963; 31 FR 12776, Sept. 30, 1966, as amended at 37 FR 28711, Dec. 29, 1972]

§ 2.718 Power of presiding officer.

A presiding officer has the duty to conduct a fair and impartial hearing according to law, to take appropriate action to avoid delay, and to maintain order. He has all powers necessary to those ends, including the powers to:

(a) Administer oaths and affirmations.

(b) Issue subpoenas authorized by law.

(c) Rule on offers of proof, and receive evidence.

(d) Order depositions to be taken.

(e) Regulate the course of the hearing and the conduct of the participants.

(f) Dispose of procedural requests or similar matters.

(g) Examine witnesses.

(h) Hold conferences before or during the hearing for settlement, simplification of the issues, or any other proper purpose.

(i) Certify questions to the Commission for its determination, either in his discretion or on direction of the Commission.

(j) Reopen a proceeding for the reception of further evidence at any time prior to initial decision.

(k) Appoint special assistants from the Atomic Safety and Licensing Board Panel pursuant to § 2.722;

(l) Issue initial decisions; and

(m) Take any other action consistent with the Act, this chapter, and sections 551–558 of Title 5 of the United States Code.

[27 FR 377, Jan. 13, 1962, as amended at 45 FR 62028, Sept. 18, 1980]

§ 2.719 [Reserved]

§ 2.720 Subpoenas.

(a) On application by any party, the designated presiding officer or, if he is not available, the Chairman of the Atomic Safety and Licensing Board Panel, the Chief Administrative Law Judge, or other designated officer will issue subpoenas requiring the attendance and testimony of witnesses or the production of evidence. The officer to whom application is made may require a showing of general relevance of the testimony or evidence sought, and may withhold the subpoena if such a showing is not made, but he shall not attempt to determine the admissibility of evidence.

(b) Every subpoena will bear the name of the Commission, the name and office of the issuing officer and the title of the hearing, and will command the person to whom it is directed to attend and give testimony or produce specified documents or other things at a designated time and place. The subpoena will also advise of the quashing procedure provided in paragraph (f) of this section.

(c) Unless the service of a subpoena is acknowledged on its face by the witness or is served by an officer or employee of the Commission, it shall be served by a person who is not a party to the hearing and is not less than eighteen (18) years of age. Service of a subpoena shall be made by delivery of a copy of the subpoena to the person named in it and tendering him the fees for one day's attendance and the mileage allowed by law. When the subpoena is issued on behalf of the Commission, fees and mileage need not be tendered, and the subpoena may be served by registered mail.

(d) Witnesses summoned by subpoena shall be paid, by the party at whose instance they appear, the fees and mileage paid to witnesses in the district courts of the United States.

(e) The person serving the subpoena shall make proof of service by filing the subpoena and affidavit or acknowledgment of service with the officer before whom the witness is required to testify or produce evidence or with the Secretary. Failure to make proof of service shall not affect the validity of the service.

(f) On motion made promptly, and in any event at or before the time specified in the subpoena for compliance by the person to whom the subpoena is directed, and on notice to the party at whose instance the subpoena was issued, the presiding officer or, if he is unavailable, the Commission may: (1) Quash or modify the subpoena if it is unreasonable or requires evidence not relevant to any matter in issue, or (2) condition denial of the motion on just and reasonable terms.

(g) On application and for good cause shown, the Commission will seek judicial enforcement of a subpoena issued to a party and which has not been quashed.

(h)(1) The provisions of paragraphs (a) through (g) of this section are not applicable to the attendance and testimony of the Commissioners or NRC personnel, or to the production of records or documents in the custody thereof.

(2)(i) In a proceeding in which the NRC is a party, the NRC staff will make available one or more witnesses designated by the Executive Director for Operations, for oral examination at the hearing or on deposition regarding any matter, not privileged, which is relevant to the issues in the proceeding. The attendance and testimony of the Commissioners and named NRC personnel at a hearing or on deposition may not be required by the presiding officer, by subpoena or otherwise: *Provided*, That the presiding officer may, upon a showing of exceptional circumstances, such as a case in which a particular named NRC employee has direct personal knowledge of a material fact not known to the witnesses made available by the Executive Director for Operations require the attendance and testimony of named NRC personnel.

(ii) In addition, a party may file with the presiding officer written interrogatories to be answered by NRC personnel with knowledge of the facts designated by the Executive Director for Operations. Upon a finding by the presiding officer that answers to the interrogatories are necessary to a proper decision in the proceeding and that answers to the interrogatories are not reasonably obtainable from any other source, the presiding officer may require that the staff answer the interrogatories.

(iii) No deposition of a particular named NRC employee or answer to interrogatories by NRC personnel pursuant to paragraphs (h)(2)(i) and (ii) of this section shall be required before the matters in controversy in the proceeding have been identified by order of the Commission or the presiding officer, pursuant to § 2.751a, or after the beginning of the prehearing conference held pursuant to § 2.752 except upon leave of the presiding officer for good cause shown.

(iv) The provisions of § 2.740 (c) and (e) shall apply to interrogatories served pursuant to this paragraph.

(3) Records or documents in the custody of the Commissioners and NRC personnel are available for inspection and copying or photographing pursuant to §§ 2.744 and 2.790.

[27 FR 377, Jan. 13, 1962, as amended at 31 FR 16310, Dec. 21, 1966; 35 FR 19501, Dec. 23, 1970; 37 FR 15132, July 28, 1972; 40 FR 2973, Jan. 17, 1975]

§ 2.721 Atomic safety and licensing boards.

(a) The Commission or the Chairman of the Atomic Safety and Licensing Board Panel may from time to time establish one or more atomic safety and licensing boards, each comprised of three members, one of whom will be qualified in the conduct of administrative proceedings and two of whom shall have such technical or other qualifications as the Commission or the Chairman of the Atomic Safety and Licensing Board Panel deems appropriate to the issues to be decided, to preside in such proceedings for granting, suspending, revoking, or amending licenses or authorizations as the Commission may designate, and to perform such other adjudicatory functions as the Commission deems appropriate. The members of an atomic safety and licensing board shall be designated from the Atomic Safety and Licensing Board Panel established by the Commission.

(b) The Commission or the Chairman of the Atomic Safety and Licensing Board Panel may designate an alternate qualified in the conduct of administrative proceedings, or an alternate having technical or other qualifications, or both, for an atomic safety and licensing board established pursuant to paragraph (a) of this section. If a member of a board becomes unavailable, the Commission or the Chairman of the Atomic Safety and Licensing Board Panel may constitute the alternate qualified in the conduct of administrative proceedings, or the alternate having technical or other qualifications, as appropriate, as a member of the board by notifying the alternate who will, as of the date of such notification, serve as member of the board. In the event that an alternate is unavailable or no alternates have been designated, and a member of a board becomes unavailable, the Commission or the Chairman of the Atomic Safety and Licensing Board Panel may appoint a member of the Atomic Safety and Licensing Board Panel who is qualified in the conduct of administrative proceedings or a member having technical or other qualifications, as appropriate, as a member of the atomic safety and licensing board by notifying the appointee who will, as of the date of such notification, serve as a member of the Board.

(c) In a proceeding in which an appeal from the initial decision may be taken to the Atomic Safety and Licensing Appeal Board, the Commission will not designate any members of the Appeal Panel as members or alternates of the Atomic Safety and Licensing Board established to preside in such proceeding.

(d) An atomic safety and licensing board shall have the duties and may exercise the powers of a presiding officer as granted by § 2.718 and otherwise in this part. At any time when such a board is in existence but is not actually in session, any powers which could be exercised by a presiding officer or by the Chief Administrative Law Judge may be exercised with respect to such a proceeding by the chairman of the board having jurisdiction over it. Two members of an atomic safety and licensing board constitute a quorum, if one of those members is the member qualified in the conduct of administrative proceedings.

[31 FR 12776, Sept. 30, 1966, as amended at 33 FR 8588, June 12, 1968; 34 FR 13361, Aug. 19, 1969; 35 FR 11459, July 17, 1970; 35 FR 19658, Dec. 29, 1970; 37 FR 15132, July 28, 1972; 37 FR 28711, Dec. 29, 1972; 40 FR 51996, Nov. 7, 1975; 48 FR 52285, Nov. 17, 1983]

§ 2.722 Special assistants to the presiding officer.

(a) In consultation with the Panel Chairman, the presiding officer may, at his discretion, appoint from the Atomic Safety and Licensing Board Panel established by the Commission, personnel to assist the presiding officer in taking evidence and preparing a suitable record for review. Such appointment may occur at any appropriate time during the proceeding but shall, at the time of the appointment, be subject to the notice and disqualification provisions as described in § 2.704. Such special assistants may function as:

(1) Technical interrogators in their individual fields of expertise. Such interrogators shall be required to study the written testimony and sit with the presiding officer to hear the presentation and cross-examination by the parties of all witnesses on the issues of the interrogators' expertise, taking a leading role in examining such witnesses to ensure that the record is as complete as possible;

(2) Upon consent of all the parties, Special Masters to hear evidentiary presentations by the parties on specific technical matters, and, upon completion of the presentation of evidence, to prepare a report that would become part of the record. Special Masters may rule on evidentiary issues brought before them, in accordance with §§ 2.743 and 2.757. Appeals from such rulings may be taken to the presiding officer in accordance with procedures which shall be established in the presiding officer's order appointing the Special Master. Special Masters' reports are advisory only; the presiding officer shall retain final authority with respect to the issues heard by the Special Master; or

(3) Alternate Atomic Safety and Licensing Board members to sit with the presiding officer, to participate in the evidentiary sessions on the issue for which the alternate members were designated by examining witnesses, and to advise the presiding officer of their conclusions through an on-the-record report. This report is advisory only; the presiding officer shall retain final authority on the issue for which the alternate member was designated.

(4) Discovery Master to rule on the matters specified in § 2.1018(a)(2) of this part.

(b) The presiding officer may, as a matter of discretion, informally seek the assistance of Members of the Atomic Safety and Licensing Board Panel to brief the presiding officer on the general technical background of subjects involving complex issues which the presiding officer might otherwise have difficulty in quickly grasping. Such informal briefings shall take place prior to the hearing on the subject involved and shall supplement the reading and study undertaken by the presiding officer. They are not subject to the procedures described in § 2.704.

[45 FR 62028, Sept. 18, 1980, as amended at 54 FR 14944, Apr. 14, 1989]

MOTIONS

§ 2.730 Motions.

(a) *Presentation and disposition.* All motions shall be addressed to the Commission or, when a proceeding is pending before a presiding officer, to the presiding officer. All written motions shall be filed with the Secretary, and served on all parties to the proceeding.

(b) *Form and content.* Unless made orally on the record during a hearing, or the presiding officer directs otherwise, a motion shall be in writing, shall state with particularity the grounds and the relief sought, and shall be accompanied by any affidavits or other evidence relied on, and, as appropriate, a proposed form of order.

(c) *Answers to motions.* Within ten (10) days after service of a written motion, or such other period as the Secretary or the Assistant Secretary or presiding officer may prescribe, a party may file an answer in support of or in opposition to the motion, accompanied by affidavits or other evidence. However, the staff may file such an answer within fifteen (15) days after service of a written motion. The moving party shall have no right to reply, except as permitted by the presiding officer or the Secretary or the Assistant Secretary.

(d) *Oral arguments; briefs.* No oral argument will be heard on a motion unless the presiding officer or the Commission directs otherwise. A written brief may be filed with a motion or an answer to a motion, stating the arguments and authorities relied on.

(e) The Board may dispose of written motions either by written order or by ruling orally during the course of a prehearing conference or hearing. The Board should ensure that parties not present for the oral ruling are notified promptly of the order.

(f) *Interlocutory appeals to the Commission.* No interlocutory appeal may be taken to the Commission from a ruling of the presiding officer. When in the judgment of the presiding officer prompt decision is necessary to prevent detriment to the public interest or unusual delay or expense, the presiding officer may refer the ruling promptly to the Commission, and notify the parties either by announcement on the record or by written notice if the hearing is not in session.

(g) *Effect of filing a motion or certification of question to the Commission.* Unless otherwise ordered, neither the filing of a motion nor the certification of a question to the Commission shall stay the proceeding or extend the time for the performance of any act.

(h) Where the motion in question is a motion to compel discovery under § 2.720(h)(2) or § 2.740(f), parties may file answers to the motion pursuant to paragraph (c) of this section. The presiding officer in his or her discretion, may order that the answer be given orally during a telephone conference or other prehearing conference, rather than in writing. If responses are given over the telephone the presiding officer shall issue a written order on the motion which summarizes the views presented by the parties. This does not preclude the presiding officer from issuing a prior oral ruling on the matter which is effective at the time of such ruling, provided that the terms of the ruling are incorporated in the subsequent written order.

[27 FR 377, Jan. 13, 1962, as amended at 28 FR 10154, Sept. 17, 1963; 37 FR 15132, July 28, 1972; 39 FR 24219, July 1, 1974; 43 FR 17802, Apr. 26, 1978; 46 FR 30331, June 8, 1981; 46 FR 58281, Dec. 1, 1981]

§ 2.731 Order of procedure.

The presiding officer or the Commission will designate the order of procedure at a hearing. The proponent o an order will ordinarily open an close.

§ 2.732 Burden of proof.

Unless otherwise ordered by the presiding officer, the applicant or the proponent of an order has the burden o proof.

§ 2.733 Examination by experts.

A party may request the presidin officer to permit a qualified individua who has scientific or technical training or experience to participate o behalf of that party in the examination and cross-examination of exper witnesses. The presiding officer ma permit such individual to participat on behalf of the party in the examination and cross-examination of exper witnesses, where it would serve th purpose of furthering the conduct o the proceeding, upon finding: (a) Tha the individual is qualified by scientifi or technical training or experience t contribute to the development of a adequate decisional record in the proceeding by the conduct of such examination or cross-examination, (b) tha the individual has read any writte testimony on which he intends to examine or cross-examine and any documents to be used or referred to in th course of the examination or cross-examination, and (c) that the individua has prepared himself to conduct meaningful and expeditious examination or cross-examination. Examination or cross-examination conducte pursuant to this section shall be limited to areas within the expertise of th individual conducting the examinatio or cross-examination. The party o behalf of whom such examination o cross-examination is conducted an his attorney shall be responsible fo the conduct of examination or cros examination by such individuals.

[37 FR 15132, July 28, 1972]

§ 2.734 Motions to reopen.

(a) A motion to reopen a close record to consider additional evidenc will not be granted unless the following criteria are satisfied:

(1) The motion must be timely except that an exceptionally grav

issue may be considered in the discretion of the presiding officer even if untimely presented.

(2) The motion must address a significant safety or environmental issue.

(3) The motion must demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially.

(b) The motion must be accompanied by one or more affidavits which set forth the factual and/or technical bases for the movant's claim that the criteria of paragraph (a) of this section have been satisfied. Affidavits must be given by competent individuals with knowledge of the facts alleged, or by experts in the disciplines appropriate to the issues raised. Evidence contained in affidavits must meet the admissibility standards set forth in § 2.743(c). Each of the criteria must be separately addressed, with a specific explanation of why it has been met. Where multiple allegations are involved, the movant must identify with particularity each issue it seeks to litigate and specify the factual and/or technical bases which it believes support the claim that this issue meets the criteria in paragraph (a) of this section.

(c) A motion predicated in whole or in part on the allegations of a confidential informant must identify to the presiding officer the source of the allegations and must request the issuance of an appropriate protective order.

(d) A motion to reopen which relates to a contention not previously in controversy among the parties must also satisfy the requirements for nontimely contentions in § 2.714(a)(1) (i) through (v).

[51 FR 19539, May 30, 1986; 51 FR 23523, June 30, 1986]

DEPOSITIONS AND WRITTEN INTERROGATORIES; DISCOVERY; ADMISSION; EVIDENCE

§ 2.740 General provisions governing discovery.

(a) *Discovery methods.* Parties may obtain discovery by one or more of the following methods: Depositions upon oral examination or written interrogatories (§ 2.740a); written interrogatories (§ 2.740b); production of documents or things or permission to enter upon land or other property, for inspection and other purposes (§ 2.741); and requests for admission (§ 2.742).

(b) *Scope of discovery.* Unless otherwise limited by order of the presiding officer in accordance with this section, the scope of discovery is as follows:

(1) *In general.* Parties may obtain discovery regarding any matter, not privileged, which is relevant to the subject matter involved in the proceeding, whether it relates to the claim or defense of any other party, including the existence, description, nature, custody, condition, and location of any books, documents, or other tangible things and the identity and location of persons having knowledge of any discoverable matter. Where any book, document or other tangible thing sought is reasonably available from another source, such as from the Commission's Public Document Room or local Public Document Room, a sufficient response to an interrogatory involving such materials would be the location, the title and a page reference to the relevant book, document or tangible thing. In a proceeding on an application for a construction permit or an operating license for a production or utilization facility, discovery shall begin only after the prehearing conference provided for in § 2.751a and shall relate only to those matters in controversy which have been identified by the Commission or the presiding officer in the prehearing order entered at the conclusion of that prehearing conference. In such a proceeding, no discovery shall be had after the beginning of the prehearing conference held pursuant to § 2.752 except upon leave of the presiding officer upon good cause shown. It is not ground for objection that the information sought will be inadmissible at the hearing if the information sought appears reasonably calculated to lead to the discovery of admissible evidence.

(2) *Trial preparation materials.* A party may obtain discovery of documents and tangible things otherwise discoverable under paragraph (b)(1) of this section and prepared in anticipation of or for the hearing by or for another party's representative (including

his attorney, consultant, surety, indemnitor, insurer, or agent) only upon a showing that the party seeking discovery has substantial need of the materials in the preparation of this case and that he is unable without undue hardship to obtain the substantial equivalent of the materials by other means. In ordering discovery of such materials when the required showing has been made, the presiding officer shall protect against disclosure of the mental impressions, conclusions, opinions, or legal theories of an attorney or other representative of a party concerning the proceeding.

(3) While interrogatories may seek to elicit factual information reasonably related to a party's position in the proceeding, including data used, assumptions made, and analyses performed by the party, such interrogatories may not be addressed to, or be construed to require: (A) Reasons for not using alternative data, assumptions, and analyses where the alternative data, assumptions, and analyses were not relied on in developing the party's position; or (B) Performance of additional research or analytical work beyond that which is needed to support the party's position on any particular matter.

(c) *Protective order.* Upon motion by a party or the person from whom discovery is sought, and for good cause shown, the presiding officer may make any order which justice requires to protect a party or person from annoyance, embarrassment, oppression, or undue burden or expense, including one or more of the following: (1) That the discovery not be had; (2) that the discovery may be had only on specified terms and conditions, including a designation of the time or place; (3) that the discovery may be had only by a method of discovery other than that selected by the party seeking discovery; (4) that certain matters not be inquired into, or that the scope of discovery be limited to certain matters; (5) that discovery be conducted with no one present except persons designated by the presiding officer; (6) that, subject to the provisions of §§ 2.744 and 2.790, a trade secret or other confidential research, development, or commercial information not be disclosed or be disclosed only in a designated way; (7) that studies and evaluations not be prepared. If the motion for a protective order is denied in whole or in part, the presiding officer may, on such terms and conditions as are just, order that any party or person provide or permit discovery.

(d) *Sequence and timing of discovery.* Unless the presiding officer upon motion, for the convenience of parties and witnesses and in the interests of justice, orders otherwise, methods of discovery may be used in any sequence and the fact that a party is conducting discovery, whether by deposition or otherwise, shall not operate to delay any other party's discovery.

(e) *Supplementation of responses.* A party who has responded to a request for discovery with a response that was complete when made is under no duty to supplement his response to include information thereafter acquired, except as follows:

(1) A party is under a duty seasonably to supplement his response with respect to any question directly addressed to (i) the identity and location of persons having knowledge of discoverable matters, and (ii) the identity of each person expected to be called as an expert witness at the hearing, the subject matter on which he is expected to testify, and the substance of his testimony.

(2) A party is under a duty seasonably to amend a prior response if he obtains information upon the basis of which (i) he knows that the response was incorrect when made, or (ii) he knows that the response though correct when made is no longer true and the circumstances are such that a failure to amend the response is in substance a knowing concealment.

(3) A duty to supplement responses may be imposed by order of the presiding officer or agreement of the parties.

(f) *Motion to compel discovery.* (1) If a deponent or party upon whom a request for production of documents or answers to interrogatories is served fails to respond or objects to the request, or any part thereof, or fails to permit inspection as requested, the deposing party or the party submitting the request may move the presiding

best copy available

officer, within ten (10) days after the date of the response or after failure of a party to respond to the request for an order compelling a response or inspection in accordance with the request. The motion shall set forth the nature of the questions or the request, the response or objection of the party upon whom the request was served, and arguments in support of the motion. For purposes of this paragraph, an evasive or incomplete answer or response shall be treated as a failure to answer or respond. Failure to answer or respond shall not be excused on the ground that the discovery sought is objectionable unless the person or party failing to answer or respond has applied for a protective order pursuant to paragraph (c) of this section.

(2) In ruling on a motion made pursuant to this section, the presiding officer may make such a protective order as he is authorized to make on a motion made pursuant to paragraph (c) of this section.

(3) This section does not preclude an independent request for issuance of a subpena directed to a person not a party for production of documents and things. This section does not apply to requests for the testimony or interrogatories of the regulatory staff pursuant to § 2.720(h)(2) or production of NRC documents pursuant to § 2.744 or § 2.790, except for paragraphs (c) and (e) of this section.

[37 FR 15133, July 28, 1972, as amended at 43 FR 17802, Apr. 26, 1978; 54 FR 33181, Aug. 11, 1989]

§ 2.740a Depositions upon oral examination and upon written interrogatories.

(a) Any party desiring to take the testimony of any party or other person by deposition on oral examination or written interrogatories shall, without leave of the Commission or the presiding officer, give reasonable notice in writing to every other party, to the person to be examined and to the presiding officer of the proposed time and place of taking the deposition; the name and address of each person to be examined, if known, or if, the name is not known, a general description sufficient to identify him or the class or group to which he belongs; the matters upon which each person will be examined and the name or descriptive title and address of the officer before whom the deposition is to be taken.

(b) [Reserved]

(c) Within the United States, a deposition may be taken before any officer authorized to administer oaths by the laws of the United States or of the place where the examination is held. Outside of the United States, a deposition may be taken before a secretary of an embassy or legation, a consul general, vice consul or consular agent of the United States, or a person authorized to administer oaths designated by the Commission.

(d) The deponent shall be sworn or shall affirm before any questions are put to him. Examination and cross-examination shall proceed as at a hearing. Each question propounded shall be recorded and the answer taken down in the words of the witness. Objections on questions of evidence shall be noted in short form without the arguments. The officer shall not decide on the competency, materiality, or relevancy of evidence but shall record the evidence subject to objection. Objections on questions of evidence not made before the officer shall not be deemed waived unless the ground of the objection is one which might have been obviated or removed if presented at that time.

(e) When the testimony is fully transcribed, the deposition shall be submitted to the deponent for examination and signature unless he is ill or cannot be found or refuses to sign. The officer shall certify the deposition or, if the deposition is not signed by the deponent, shall certify the reasons for the failure to sign, and shall promptly forward the deposition by registered mail to the Commission.

(f) Where the deposition is to be taken on written interrogatories, the party taking the deposition shall serve a copy of the interrogatories, showing each interrogatory separately and consecutively numbered, on every other party with a notice stating the name and address of the person who is to answer them, and the name, description, title, and address of the officer before whom they are to be taken.

Within ten (10) days after service, any other party may serve cross-interrogatories. The interrogatories, cross-interrogatories, and answers shall be recorded and signed, and the deposition certified, returned, and filed as in the case of a deposition on oral examination.

(g) A deposition will not become a part of the record in the hearing unless received in evidence. If only part of a deposition is offered in evidence by a party, any other party may introduce any other parts. A party shall not be deemed to make a person his own witness for any purpose by taking his deposition.

(h) A deponent whose deposition is taken and the officer taking a deposition shall be entitled to the same fees as are paid for like services in the district courts of the United States, to be paid by the party at whose instance the deposition is taken.

(i) The witness may be accompanied, represented, and advised by legal counsel.

(j) The provisions of paragraphs (a) through (i) of this section are not applicable to NRC personnel. Testimony of NRC personnel by oral examination and written interrogatories addressed to NRC personnel are subject to the provisions of § 2.720(h).

[27 FR 377, Jan. 13, 1962, as amended at 35 FR 19501, Dec. 23, 1970. Redesignated at 37 FR 15133, July 28, 1972, and amended at 43 FR 17802, Apr. 26, 1978]

§ 2.740b Interrogatories to parties.

(a) Any party may serve upon any other party (other than the staff)[4] written interrogatories to be answered in writing by the party served, or if the party served is a public or private corporation or a partnership or association, by any officer or agent, who shall furnish such information as is available to the party. A copy of the interrogatories, answers, and all related pleadings shall be filed with the Secretary of the Commission and shall be served on the presiding officer and upon all parties to the proceeding.

(b) Each interrogatory shall be answered separately and fully in writing under oath or affirmation, unless it is objected to, in which event the reasons for objection shall be stated in lieu of an answer. The answers shall be signed by the person making them, and the objections by the attorney making them. The party upon whom the interrogatories were served shall serve a copy of the answers and objections upon all parties to the proceeding within 14 days after service of the interrogatories, or within such shorter or longer period as the presiding officer may allow. Answers may be used in the same manner as depositions (see § 2.740a(g)).

[37 FR 15134, July 28, 1972]

§ 2.741 Production of documents and things and entry upon land for inspection and other purposes.

(a) *Request for discovery.* Any party may serve on any other party a request to:

(1) Produce and permit the party making the request, or a person acting on his behalf, to inspect and copy any designated documents, or to inspect and copy, test, or sample any tangible things which are within the scope of § 2.740 and which are in the possession, custody, or control of the party upon whom the request is served; or

(2) Permit entry upon designated land or other property in the possession or control of the party upon whom the request is served for the purpose of inspection and measuring, surveying, photographing, testing, or sampling the property or any designated object or operation thereon, within the scope of § 2.740.

(b) *Service.* The request may be served on any party without leave of the Commission or the presiding officer. Except as otherwise provided in § 2.740, the request may be served after the proceeding is set for hearing.

(c) *Contents.* The request shall set forth the items to be inspected either by individual item or by category, and describe each item and category with reasonable particularity. The request shall specify a reasonable time, place, and manner of making the inspection and performing the related acts.

(d) *Response.* The party upon whom the request is served shall serve on the arty submitting the request a written esponse within thirty (30) days after he service of the request. The response shall state, with respect to each em or category, that inspection and elated activities will be permitted as equested, unless the request is objectd to, in which case the reasons for obection shall be stated. If objection is nade to part of an item or category, he part shall be specified.

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[4] Interrogatories addressed to the staff are subject to § 2.720(h)(2)(ii).

(e) *NRC records and documents.* The rovisions of paragraphs (a) through d) of this section do not apply to the roduction for inspection and copying r photographing of NRC records or ocuments. Production of such records r documents is subject to the provions of §§ 2.744 and 2.790.

37 FR 15134, July 28, 1972]

2.742 Admissions.

(a) Apart from any admissions made luring or as a result of a prehearing onference, at any time after his nswer has been filed, a party may file written request for the admission of he genuineness and authenticity of ny relevant document described in or ttached to the request, or for the adnission of the truth of any specified elevant matter of fact. A copy of the locument shall be delivered with the equest unless a copy has already been urnished.

(b) Each requested admission shall e deemed made unless, within a time lesignated by the presiding officer or he Commission, and not less than ten 10) days after service of the request r such further time as may be alowed on motion, the party to whom he request is directed serves on the equesting party either (1) a sworn tatement denying specifically the relevant matters of which an admission is equested or setting forth in detail the easons why he can neither truthfully dmit nor deny them, or (2) written bjections on the ground that some or ll of the matters involved are privileged or irrelevant or that the request s otherwise improper in whole or in part. Answers on matters to which uch objections are made may be deferred until the objections are determined. If written objections are made o only a part of a request, the remainder of the request shall be answered within the time designated.

(c) Admissions obtained pursuant to the procedure in this section may be used in evidence to the same extent and subject to the same objections as other admissions.

[27 FR 377, Jan. 13, 1962, as amended at 37 FR 15134, July 28, 1972]

§ 2.743 Evidence.

(a) *General.* Every party to a proceeding shall have the right to present such oral or documentary evidence and rebuttal evidence and to conduct, in accordance with an approved cross-examination plan that contains the information specified in paragraph (b)(2) of this section if so directed by the presiding officer, such cross-examination as may be required for full and true disclosure of the facts.

(b)(1) *Testimony and cross-examination.* The parties shall submit direct testimony of witnesses in written form, unless otherwise ordered by the presiding officer on the basis of objections presented. In any proceeding in which advance written testimony is to be used, each party shall serve copies of its proposed written testimony on each other party at least fifteen (15) days in advance of the session of the hearing at which its testimony is to be presented. The presiding officer may permit the introduction of written testimony not so served, either with the consent of all parties present or after they have had a reasonable opportunity to examine it. Written testimony must be incorporated into the transcript of the record as if read or, in the discretion of the presiding officer, may be offered and admitted in evidence as an exhibit.

(2) The presiding officer may require a party seeking an opportunity to cross-examine to request permission to do so in accordance with a schedule established by the presiding officer. A request to conduct cross-examination shall be accompanied by a cross-examination plan that contains the following information:

(i) A brief description of the issue or issues on which cross-examination will be conducted;

(ii) The objective to be achieved by cross-examination; and

(iii) The proposed line of questions that may logically lead to achieving the objective of the cross-examination. The cross-examination plan may be submitted only to the presiding officer and must be kept by the presiding officer in confidence until issuance of the initial decision on the issue being litigated. The presiding officer shall then provide each cross-examination plan to the Commission's Secretary for inclusion in the official record of the proceeding.

(3) Paragraphs (b)(1) and (2) of this section do not apply to proceedings under subpart B of this part for modification, suspension, or revocation of a license or to proceedings for imposition of a civil penalty.

(c) *Admissibility.* Only relevant, material, and reliable evidence which is not unduly repetitious will be admitted. Immaterial or irrelevant parts of an admissible document will be segregated and excluded so far as is practicable.

(d) *Objections.* An objection to evidence shall briefly state the grounds of objection. The transcript shall include the objection, the grounds, and the ruling. Exception to an adverse ruling is preserved without notation on the record.

(e) *Offer of proof.* An offer of proof made in connection with an objection to a ruling of the presiding officer excluding or rejecting proffered oral testimony shall consist of a statement of the substance of the proffered evidence. If the excluded evidence is written, a copy shall be marked for identification. Rejected exhibits, adequately marked for identification, shall be retained in the record.

(f) *Exhibits.* A written exhibit will not be received in evidence unless the original and two copies are offered and a copy is furnished to each party, or the parties have been previously furnished with copies or the presiding officer directs otherwise. The presiding officer may permit a party to replace with a true copy an original document admitted in evidence. Exhibits in the proceeding on an application for a license to receive and possess high-level radioactive waste at a geologic repository operations area are governed by § 2.1013 of this part.

(g) *Proceedings involving applications.* In any proceeding involving an application, there shall be offered in evidence by the staff any report submitted by the ACRS in the proceeding in compliance with section 182b. of the Act, any safety evaluation prepared by the staff and any environmental impact statement prepared by the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, or his designee in the proceeding pursuant to Subpart A of Part 51 of this chapter.

(h) *Official record.* An official record of a government agency or entry in an official record may be evidenced by an official publication or by a copy attested by the officer having legal custody of the record and accompanied by a certificate of his custody.

(i) *Official notice.* (1) The Commission or the presiding officer may take official notice of any fact of which a court of the United States may take judicial notice or of any technical or scientific fact within the knowledge of the Commission as an expert body. Each fact officially noticed under this subparagraph shall be specified in the record with sufficient particularity to advise the parties of the matters which have been noticed or brought to the attention of the parties before final decision and each party adversely affected by the decision shall be given opportunity to controvert the fact.

(2) If a decision is stated to rest in whole or in part on official notice of a fact which the parties have not had a prior opportunity to controvert, a party may controvert the fact by filing an appeal from an initial decision or a petition for reconsideration of a final decision clearly and concisely setting forth the information relied upon to show the contrary.

[27 FR 377, Jan. 13, 1962, as amended at 28 FR 10154, Sept. 17, 1963; 31 FR 4339, Mar. 12, 1966; 37 FR 15134, July 28, 1972; 43 FR 17802, Apr. 26, 1978; 48 FR 52285, Nov. 17, 1983; 49 FR 9401, Mar. 12, 1984; 54 FR 14944, Apr. 14, 1989; 54 FR 33181, Aug. 11, 1989]

§ 2.744 Production of NRC records and documents.

(a) A request for the production of an NRC record or document not available pursuant to § 2.790 by a party to an initial licensing proceeding may be served on the Executive Director for Operations, without leave of the Commission or the presiding officer. The request shall set forth the records or documents requested, either by individual item or by category, and shall describe each item or category with reasonable particularity and shall state why that record or document is relevant to the proceeding.

(b) If the Executive Director for Operations objects to producing a requested record or document on the ground that (1) it is not relevant or (2) it is exempted from disclosure under § 2.790 and the disclosure is not necessary to a proper decision in the proceeding or the document or the information therein is reasonably obtainable from another source, he shall so advise the requesting party.

(c) If the Executive Director for Operations objects to producing a record or document, the requesting party may apply to the presiding officer, in writing, to compel production of that record or document. The application shall set forth the relevancy of the record or document to the issues in the proceeding. The application shall be processed as a motion in accordance with § 2.730 (a) through (d). The record or document covered by the application shall be produced for the "in camera" inspection of the presiding officer, exclusively, if requested by the presiding officer and only to the extent necessary to determine:

(1) The relevancy of that record or document;

(2) Whether the document is exempt from disclosure under § 2.790;

(3) Whether the disclosure is necessary to a proper decision in the proceeding;

(4) Whether the document or the information therein is reasonably obtainable from another source.

(d) Upon a determination by the presiding officer that the requesting party has demonstrated the relevancy of the record or document and that its production is not exempt from disclosure under § 2.790 or that, if exempt, its disclosure is necessary to a proper decision in the proceeding, and the document or the information therein is not reasonably obtainable from another source, he shall order the Executive Director for Operations, to produce the document.

(e) In the case of requested documents and records (including Safeguards Information referred to in sections 147 and 181 of the Atomic Energy Act, as amended) exempt from disclosure under § 2.790, but whose disclosure is found by the presiding officer to be necessary to a proper decision in the proceeding, any order to the Executive Director for Operations to produce the document or records (or any other order issued ordering production of the document or records) may contain such protective terms and conditions (including affidavits of non-disclosure) as may be necessary and appropriate to limit the disclosure to parties in the proceeding, to interested States and other governmental entities participating pursuant to § 2.715(c), and to their qualified witnesses and counsel. When Safeguards Information protected from disclosure under section 147 of the Atomic Energy Act, as amended, is received and possessed by a party other than the Commission staff, it shall also be protected according to the requirements of § 73.21 of this chapter. The presiding officer may also prescribe such additional procedures as will effectively safeguard and prevent disclosure of Safeguards Information to unauthorized persons with minimum impairment of the procedural rights which would be available if Safeguards Information were not involved. In addition to any other sanction that may be imposed by the presiding officer for violation of an order issued pursuant to this paragraph, violation of an order pertaining to the disclosure of Safeguards Information protected from disclosure under section 147 of the Atomic Energy Act, as amended, may be subject to a civil penalty imposed pursuant to § 2.205. For the purpose of imposing the criminal penalties contained in section 223 of the Atomic Energy Act, as amended, any order issued pursuant to this paragraph with respect to Safeguards Information shall be deemed an order issued under section 161b of the Atomic Energy Act.

(f) A ruling by the presiding officer, the Atomic Safety and Licensing Appeal Board, or the Commission for the production of a record or document will specify the time, place, and manner of production.

(g) No request pursuant to this section shall be made or entertained before the matters in controversy have been identified by the Commission or the presiding officer, or after the beginning of the prehearing conference held pursuant to § 2.752 except upon leave of the presiding officer for good cause shown.

(h) The provisions of § 2.740 (c) and (e) shall apply to production of NRC records and documents pursuant to this section.

[37 FR 15135, July 28, 1972, as amended at 40 FR 2973, Jan. 17, 1975; 46 FR 51723, Oct. 22, 1981]

Summary Disposition on Pleadings

§ 2.749 Authority of presiding officer to dispose of certain issues on the pleadings.

(a) Any party to a proceeding may move, with or without supporting affidavits, for a decision by the presiding officer in that party's favor as to all or any part of the matters involved in the proceeding. The moving party shall annex to the motion a separate, short, and concise statement of the material facts as to which the moving party contends that there is no genuine issue to be heard. Motions may be filed at any time. Any other party may serve an answer supporting or opposing the motion, with or without affidavits, within twenty (20) days after service of the motion. The party shall annex to any answer opposing the motion a separate, short, and concise statement of the material facts as to which it is contended there exists a genuine issue to be heard. All material facts set forth in the statement required to be served by the moving party will be deemed to be admitted unless controverted by the statement required to be served by the opposing party. The opposing party may, within

ten (10) days after service, respond
writing to new facts and argume
presented in any statement filed
support of the motion. No further s
porting statements or responses the
to may be entertained. The presid
officer may dismiss summarily or h
in abeyance motions filed shor
before the hearing commences
during the hearing if the other part
or the presiding officer would be
quired to divert substantial resour
from the hearing in order to respo
adequately to the motion and there
extend the proceeding.

(b) Affidavits shall set forth su
facts as would be admissible in e
dence and shall show affirmativ
that the affiant is competent to test
to the matters stated therein. The p
siding officer may permit affidavits
be supplemented or opposed by depo
tions, answers to interrogatories
further affidavits. When a motion
summary decision is made and s
ported as provided in this section
party opposing the motion may
rest upon the mere allegations or de
als of his answer; his answer by affi
vits or as otherwise provided in t
section must set forth specific fa
showing that there is a genuine iss
of fact. If no such answer is filed, t
decision sought, if appropriate, sh
be rendered.

(c) Should it appear from the affi
vits of a party opposing the moti
that he cannot, for reasons stat
present by affidavit facts essential
justify his opposition, the presiding
ficer may refuse the application
summary decision or may order a co
tinuance to permit affidavits to be
tained or make such other order as
appropriate and a determination
that effect shall be made a matter
record.

(d) The presiding officer sh
render the decision sought if the
ings in the proceeding, depositions, a
swers to interrogatories, and adm
sions on file, together with the sta
ments of the parties and the affid
vits, if any, show that there is no ge
uine issue as to any material fact a
that the moving party is entitled to
decision as a matter of law. Howev
in any proceeding involving a co
struction permit for a production

utilization facility, the procedure described in this section may be used only for the determination of specific subordinate issues and may not be used to determine the ultimate issue as to whether the permit shall be issued.

[37 FR 15135, July 28, 1972, as amended at 46 FR 30331, June 8, 1981; 54 FR 33181, Aug. 11, 1989]

HEARINGS

§ 2.750 Official reporter; transcript.

(a) A hearing will be reported under the supervision of the presiding officer, stenographically or by other means, by an official reporter who may be designated from time to time by the Commission or may be a regular employee of the Commission. The transcript prepared by the reporter shall be the sole official transcript of the proceeding. Except as limited pursuant to section 181 of the Act or order of the Commission, the transcript will be open for inspection at the Public Document Room. Copies of transcripts are available to parties and to the public from the official reporter on payment of the charges fixed therefor.

(b) *Transcript corrections.* Corrections of the official transcript may be made only in the manner provided by this paragraph. Corrections ordered or approved by the presiding officer shall be included in the record as an appendix, and when so incorporated the Secretary shall make the necessary physical corrections in the official transcript so that it will incorporate the changes ordered. In making corrections there shall be no substitution of pages but, to the extent practicable, corrections shall be made by running a line through the matter to be changed without obliteration and writing the matter as changed immediately above. Where the correction consists of an insertion, it shall be added by rider or interlineation as near as possible to the text which is intended to precede and follow it.

(c) *Free transcript.* Except in an antitrust proceeding, in any adjudicatory proceeding on an application for a license or an amendment thereto, the presiding officer may arrange for provision of one free transcript to a party, other than the applicant, upon request by that party. The transcript will be made available to a party at the same time and location as it is made available to the NRC staff. If a transcript is mailed to the staff, it will also be mailed to the requesting party. A presiding officer has the discretion to control the distribution of transcripts to parties.[1]

[27 FR 377, Jan. 13, 1962, as amended at 45 FR 49537, July 25, 1980; 45 FR 54725, Aug. 18, 1980; 46 FR 13681, Feb. 2, 1981]

§ 2.751 Hearings to be public.

Except as may be requested pursuant to section 181 of the Act, all hearings will be public unless otherwise ordered by the Commission.

§ 2.751a Special prehearing conference in construction permit and operating license proceedings.

(a) In any proceeding involving an application for a construction permit or an operating license for a production or utilization facility, the Commission or the presiding officer will direct the parties and any petitioners for intervention, or their counsel, to appear at a specified time and place, within ninety (90) days after the notice of hearing is published, or such other time as the Commission or the presiding officer may deem appropriate, for a conference[1a] to:

(1) Permit identification of the key issues in the proceeding;

(2) Take any steps necessary for further identification of the issues;

(3) Consider all intervention petitions to allow the presiding officer to make such preliminary or final determination as to the parties to the proceeding, as may be appropriate; and

(4) Establish a schedule for further actions in the proceeding.

(b) The presiding officer may order any further informal conferences among the parties, including telephone conferences, to the extent that he considers that such a conference would expedite the proceeding.

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[1] This paragraph is suspended until further action of the Commission. (See 46 FR 13681, Feb. 24, 1981)

[1a] This conference may be omitted in proceedings other than contested proceedings.

(c) A prehearing conference held pursuant to this section may be stenographically reported.

(d) The presiding officer shall enter an order which recites the action taken at the conference, the schedule for further actions in the proceeding, any agreements by the parties, and which identifies the key issues in the proceeding, makes a preliminary or final determination as to the parties in the proceeding, and provides for the submission of status reports on discovery. The order shall be served upon all parties to the proceeding. Objections to the order may be filed by a party within five (5) days after service of the order, except that the staff may file objections to such order within ten (10) days after service. Parties may not file replies to the objections unless the Board so directs. The filing of objections shall not stay the decision unless the presiding officer so orders. The board may revise the order in consideration of the objections presented and, as permitted by § 2.718(i), may certify for determination to the Commission or the Atomic Safety and Licensing Appeal Board, as appropriate, such matters raised in the objections as it deems appropriate. The order shall control the subsequent course of the proceeding unless modified for good cause.

[37 FR 15135, July 28, 1972, as amended at 43 FR 17802, Apr. 26, 1978; 46 FR 30331, June 8, 1981]

§ 2.752 Prehearing conference.

(a) The Commission or the presiding officer may, and in the case of a proceeding on an application for a construction permit or an operating license for a facility of a type described in §§ 50.21(b) or 50.22 of this chapter or a testing facility, shall direct the parties or their counsel to appear at a specified time and place for a conference to consider:

(1) Simplification, clarification, and specification of the issues;

(2) The necessity or desirability of amending the pleadings;

(3) The obtaining of stipulations and admissions of fact and of the contents and authenticity of documents to avoid unnecessary proof;

(4) Identification of witnesses and the limitation of the number of expert witnesses, and other steps to expedite the presentation of evidence;

(5) The setting of a hearing schedule; and

(6) Such other matters as may aid in the orderly disposition of the proceeding.

A prehearing conference held under this section in a proceeding involving a construction permit or operating license shall be held within sixty (60) days after discovery has been completed,[1] or such other time as the Commission or the presiding officer may specify.

(b) Prehearing conferences may be stenographically reported.

(c) The presiding officer shall enter an order which recites the action taken at the conference, the amendments allowed to the pleadings and agreements by the parties, and which limits the issues or defines the matters in controversy to be determined in the proceeding. Objections to the order may be filed by a party within five (5) days after service of the order, except that the regulatory staff may file objections to such order within ten (10) days after service. Parties may not file replies to the objections unless the board so directs. The filing of objections shall not stay the decision unless the presiding officer so orders. The board may revise the order in the light of the objections presented and, as permitted by § 2.718(i) may certify for determination to the Commission or the Atomic Safety and Licensing Appeal Board, as appropriate, such matters raised in the objections as it deems appropriate. The order shall control the subsequent course of the proceeding unless modified for good cause.

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[1] Discovery, as used in this section, does not include the production of the ACRS report, the safety evaluation prepared by the regulatory staff, or any detailed statement on environmental considerations prepared by the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate or his designee in the proceeding pursuant to Part 51 of this chapter.

[27 FR 377, Jan. 13, 1962, as amended at 37 FR 15136, July 28, 1972; 40 FR 8777, Mar. 3, 1975; 46 FR 30331, June 8, 1981]

§ 2.753 Stipulations.

Apart from any stipulations made during or as a result of a prehearing conference, the parties may stipulate in writing at any stage of the proceeding or orally during the hearing, any relevant fact or the contents or authenticity of any document. Such a stipulation may be received in evidence. The parties may also stipulate as to the procedure to be followed in the proceeding. Such stipulations may, on motion of all parties, be recognized by the presiding officer to govern the conduct of the proceeding.

[37 FR 15136, July 28, 1972]

§ 2.754 Proposed findings and conclusions.

(a) Any party to a proceeding may, or if directed by the presiding officer shall, file proposed findings of fact and conclusions of law, briefs and a proposed form or order of decision within the time provided by the following subparagraphs, except as otherwise ordered by the presiding officer:

(1) The party who has the burden of proof shall, within thirty (30) days after the record is closed, file proposed findings of fact and conclusions of law and briefs, and a proposed form of order or decision.

(2) Other parties may file proposed findings, conclusions of law and briefs within forty (40) days after the record is closed. However, the staff may file such proposed findings, conclusions of law and briefs within fifty (50) days after the record is closed.

(3) A party who has the burden of proof may reply within five (5) days after filing of proposed findings and conclusions of law and briefs by other parties.

(b) Failure to file proposed findings of fact, conclusions of law or briefs when directed to do so may be deemed a default, and an order or initial decision may be entered accordingly.

(c) Proposed findings of fact must be clearly and concisely set forth in numbered paragraphs and must be confined to the material issues of fact presented on the record, with exact citations to the transcript of record and exhibits in support of each proposed finding. Proposed conclusions of law must be set forth in numbered paragraphs as to all material issues of law or discretion presented on the record. An intervenor's proposed findings of fact and conclusions of law must be confined to issues which that party placed in controversy or sought to place in controversy in the proceeding.

[27 FR 377, Jan. 13, 1962, as amended at 28 FR 10154, Sept. 17, 1963; 35 FR 11459, July 17, 1970; 43 FR 17802, Apr. 26, 1978; 46 FR 30331, June 8, 1981; 54 FR 33182, Aug. 11, 1989]

§ 2.755 Oral argument before presiding officer.

When, in the opinion of the presiding officer, time permits and the nature of the proceeding and the public interest warrant, he may allow and fix a time for the presentation of oral argument. He will impose appropriate limits of time on the argument. The transcript of the argument shall be a part of the record.

§ 2.756 Informal procedures.

The Commission encourages the use of informal procedures consistent with the Act, sections 551-558 of Title 5 of the United States Code, and the regulations in this chapter, and with the orderly conduct of the proceeding and the necessity for preserving a suitable record for review.

[35 FR 11459, July 17, 1970]

§ 2.757 Authority of presiding officer to regulate procedure in a hearing.

To prevent unnecessary delays or an unnecessarily large record, the presiding officer may:

(a) Limit the number of witnesses whose testimony may be cumulative;

(b) Strike argumentative, repetitious, cumulative, or irrelevant evidence;

(c) Take necessary and proper measures to prevent argumentative, repetitious, or cumulative cross-examination; and

(d) Impose such time limitations on arguments as he determines appropriate, having regard for the volume of the evidence and the importance and complexity of the issues involved.

[37 FR 15136, July 28, 1972]

§ 2.758 Consideration of Commission rules and regulations in adjudicatory proceedings.

(a) Except as provided in paragraphs (b), (c), and (d) of this section, any rule or regulation of the Commission, or any provision thereof, issued in its program for the licensing and regulation of production and utilization facilities, source material, special nuclear material or by-product material, shall not be subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding involving initial licensing subject to this subpart, other than a pending proceeding wherein a party has attacked such rule or regulation, and the presiding officer, the Atomic Safety and Licensing Appeal Board or the Commission has ruled thereon before August 27, 1972.

(b) A party to an adjudicatory proceeding involving initial licensing subject to this subpart may petition that the application of a specified Commission rule or regulation or any provision thereof, of the type described in paragraph (a) of this section, be waived or an exception made for the particular proceeding. The sole ground for petition for waiver or exception shall be that special circumstances with respect to the subject matter of the particular proceeding are such that application of the rule or regulation (or provision thereof) would not serve the purposes for which the rule or regulation was adopted. The petition shall be accompanied by an affidavit that identifies the specific aspect or aspects of the subject matter of the proceeding as to which application of the rule or regulation (or provision thereof) would not serve the purposes for which the rule or regulation was adopted, and shall set forth with particularity the special circumstances alleged to justify the waiver or exception requested. Any other party may file a response thereto, by counter-affidavit or otherwise.

(c) If, on the basis of the petition, affidavit and any response thereto provided for in paragraph (b) of this section, the presiding officer determines that the petitioning party has not made a prima facie showing that the application of the specific Commission rule or regulation or provision thereof to a particular aspect or aspects of the subject matter of the proceeding would not serve the purposes for which the rule or regulation was adopted and that application of the rule or regulation should be waived or an exception granted, no evidence may be received on that matter and no discovery, cross-examination or argument directed to the matter will be permitted, and the presiding officer may not further consider the matter.

(d) If, on the basis of the petition, affidavit and any response provided for in paragraph (b) of this section, the presiding officer determines that such a prima facie showing has been made, the presiding officer shall, before ruling thereon, certify directly to the Commission[7] for determination the matter of whether the application of the Commission rule or regulation or provision thereof to a particular aspect or aspects of the subject matter of the proceeding, in the context of this section, should be waived or an exception made. The Commission may, among other things, on the basis of the petition, affidavits, and any response, determine whether the application of the specified rule or regulation (or provision thereof) should be waived or an exception be made, or the Commission may direct such further proceedings as it deems appropriate to aid its determination.

(e) Whether or not the procedure in paragraph (b) of this section is available, a party to an initial licensing proceeding may file a petition for rule making pursuant to § 2.802.

[37 FR 15136, July 28, 1972]

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[7] The matter will be certified to the Commission notwithstanding the provisions of § 2.785.

§ 2.759 Settlement in initial licensing proceedings.

The Commission recognizes that the public interest may be served through settlement of particular issues in a proceeding or the entire proceeding. Therefore, to the extent that it is not inconsistent with hearing requirements in section 189 of the Act (42 U.S.C. 2239), the fair and reasonable settlement of contested initial licensing proceedings is encouraged. It is expected that the presiding officer and all of the parties to those proceedings will take appropriate steps to carry out this purpose.

[37 FR 15137, July 28, 1972]

INITIAL DECISION AND COMMISSION REVIEW

§ 2.760 Initial decision and its effect.

(a) After hearing, the presiding officer will render an initial decision which will constitute the final action of the Commission forty-five (45) days after its date when it authorizes the issuance or amendment of a license or limited work authorization for a facility, or thirty (30) days after its date in any other case, unless an appeal is taken in accordance with § 2.762 or the Commission directs that the record be certified to it for final decision.

(b) Where the public interest so requires, the Commission may direct that the presiding officer certify the record to it without an initial decision, and may:

(1) Prepare its own initial decision, which will become final unless a notice of appeal is filed; or

(2) Omit an initial decision on a finding that due and timely execution of its functions imperatively and unavoidably so requires.

(c) An initial decision will be in writing and will be based on the whole record and supported by reliable, probative, and substantial evidence. The initial decision will include:

(1) Findings, conclusions and rulings, with the reasons or basis for them, on all material issues of fact, law, or discretion presented on the record;

(2) All facts officially noticed and relied on in making the decision;

(3) The appropriate ruling, order or denial of relief with the effective date;

(4) The time within which a notice of appeal from the decision and a supporting brief may be filed, the time within which briefs in support of or in opposition to an appeal filed by another party may be filed and, in the case of an initial decision which may become final in accordance with paragraph (a) of this section, the date when it may become final.

[27 FR 377, Jan. 13, 1962, as amended at 31 FR 4339, Mar. 12, 1966; 35 FR 11459, July 17, 1970; 48 FR 52285, Nov. 17, 1983]

§ 2.760a Initial decision in contested proceedings on applications for facility operating licenses.

In any initial decision in a contested proceeding on an application for an operating license for a production or utilization facility, the presiding officer shall make findings of fact and conclusions of law on the matters put into controversy by the parties to the proceeding and on matters which have been determined to be the issues in the proceeding by the Commission or the presiding officer. Matters not put into controversy by the parties will be examined and decided by the presiding officer only where he or she determines that a serious safety, environmental, or common defense and security matter exists. Depending on the resolution of those matters, the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, after making the requisite findings, will issue, deny, or appropriately condition the license.

[44 FR 67088, Nov. 23, 1979]

§ 2.761 Expedited decisional procedure.

(a) The presiding officer may determine a proceeding by an order after the conclusion of a hearing without issuing an initial decision, when:

(1) All parties stipulate that the initial decision may be omitted and waived their rights to file a notice of appeal, to request oral argument, and to seek judicial review;

(2) No unresolved substantial issue of fact, law, or discretion remains, and the record clearly warrants granting the relief requested; and

(3) The presiding officer finds that dispensing with the issuance of the initial decision is in the public interest.

(b) An order entered pursuant to paragraph (a) of this section shall be subject to review by the Commission on its own motion within thirty (30) days after its date.

(c) An initial decision may be made effective immediately, subject to review by the Commission on its own motion within thirty (30) days after its date, except as otherwise provided in this chapter, when:

(1) All parties stipulate that the initial decision may be made effective immediately and waive their rights to file a notice of appeal, to request oral argument, and to seek judicial review;

(2) No unresolved substantial issue of fact, law, or discretion remains and the record clearly warrants granting the relief requested; and

(3) The presiding officer finds that it is in the public interest to make the initial decision effective immediately.

(d) The provisions of this section do not apply to an initial decision directing the issuance or amendment of a construction permit or construction authorization, or the issuance of an operating license or provisional operating authorization.

[27 FR 377, Jan. 13, 1962, as amended at 28 FR 7935, Aug. 3, 1963; 28 FR 10154, Sept. 17, 1963; 35 FR 5318, Mar. 31, 1970; 48 FR 52285, Nov. 17, 1983]

§ 2.761a Separate hearings and decisions.

In a proceeding on an application for a construction permit for a utilization facility which is subject to § 51.20(b) of this chapter, and is of the type specified in § 51.21(b) (2) or (3) or § 50.22 of this chapter or is a testing facility, the presiding officer shall unless the parties agree otherwise or the rights of any party would be prejudiced thereby, commence a hearing on issues covered by § 50.10(e)(2)(ii) and Subpart A of Part 51 of this chapter as soon as practicable after issuance of the staff of its final environmental impact statement, but no later than thirty (30) days after issuance of such statement, and complete such a hearing and issue an initial decision on such matters. Pehearing procedures regarding issues covered by Subpart A of Part 51 and § 51.10(e)(2)(ii) of this chapter, including any discovery and special prehearing conferences and prehearing conferences as provided in §§ 2.740, 2.740a, 2.740b, 2.741, 2.742, 2.751a, and 2.752, shall be scheduled accordingly. The provisions of §§ 2.754, 2.755, 2.760, 2,762, 2.763, and 2.764(a) shall apply to any proceeding conducted and any initial decision rendered in accordance with this section. Section 2.764(b) shall not apply to any partial initial decision rendered in accordance with this section. This section shall not preclude separate hearings and decisions on other particular issues.

[49 FR 9402, Mar. 12, 1984]

§ 2.762 Appeals to the Commission from initial decisions.

(a) *Notice of appeal.* Within ten (10) days after service of an initial decision, any party may take an appeal to the Commission by filing a notice of appeal. The notice shall specify:

(1) The party taking the appeal; and

(2) The decision being appealed.

(b) *Filing appellant's brief.* Each appellant shall file a brief supporting its position on appeal within thirty (30) days (40 days if Commission staff is the appellant) after the filing of notice required by paragraph (a) of this section.

(c) *Filing responsive brief.* Any party who is not an appellant may file a brief in support of or in opposition to the appeal within thirty (30) days after the period has expired for the filing and service of the brief of all appellants. Commission staff may file a responsive brief within forty (40) days after the period has expired for the filing and service of the briefs of all appellants. A responding party shall file a single responsive brief regardless of the number of appellants' briefs filed.

(d) *Brief Content.* A brief in excess of ten (10) pages must contain a table of contents, with page references, and a table of cases (alphabetically arranged), statutes, regulations, and other authorities cited, with references to the pages of the brief where they are cited.

(1) An appellant's brief must clearly identify the errors of fact or law that

are the subject of the appeal. An intervenor-appellant's brief must be confined to issues which the intervenor-appellant placed in controversy or sought to place in controversy in the proceeding. For each issue appealed, the precise portion of the record relied upon in support of the assertion of error must also be provided.

(2) Each responsive brief must contain a reference to the precise portion of the record which supports each factual assertion made.

(e) *Brief length.* A party shall not file a brief in excess of seventy (70) pages in length, exclusive of pages containing the table of contents, table of citations and any addendum containing statutes, rules, regulations, etc. A party may request an increase of this page limit for good cause. Such a request shall be made by motion submitted at least seven (7) days before the date upon which the brief is due for filing and shall specify the enlargement requested.

(f) *Certificate of service.* All documents filed under this section must be accompanied by a certificate reflecting service upon all other parties to the proceeding.

(g) *Failure to comply.* A brief which in form or content is not in substantial compliance with the provisions of this section may be stricken, either on motion of a party or by the Commission on it own initiative.

[48 FR 52285, Nov. 17, 1983, as amended at 54 FR 33182, Aug. 11, 1989]

§ 2.763 Oral argument.

In its discretion the Commission may allow oral argument upon the request of a party made in a notice of appeal or brief, or upon its own initiative.

[48 FR 52286, Nov. 17, 1983]

§ 2.764 Immediate effectiveness of intitial decision directing issuance or amendment of construction permit or operating license.

(a) Except as provided in paragraphs (c) through (f) of this section, or as otherwise ordered by the Commission in special circumstances, an initial decision directing the issuance or amendment of a construction permit, a construction authorization, or an operating license shall be effective immediately upon issuance unless the presiding officer finds that good cause has been shown by a party why the initial decision should not become immediately effective, subject to the review thereof and further decision by the Commission upon notice of appeal filed by any party pursuant to § 2.762 or upon its own motion.

(b) Except as provided in paragraphs (c) through (f) of this section, or as otherwise ordered by the Commission in special circumstances, the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, notwithstanding the filing of a notice of appeal, shall issue a construction permit, a construction authorization, or an operating license, or amendments thereto, authorized by an initial decision, within ten (10) days from the date of issuance of the decision.

(c) An initial decision directing the issuance of an initial license for the construction and operation of an independent spent fuel storage installation (ISFSI) or monitored retrievable storage installation (MRS) under 10 CFR Part 72 shall become effective only upon order of the Commission. The Director of Nuclear Material Safety and Safeguards shall not issue an initial license for the construction and operation of an independent spent fuel storage installation (ISFSI) or a monitored retrievable storage installation (MRS) under 10 CFR Part 72 until expressly authorized to do so by the Commission.

(d) [Reserved]

(e) *Nuclear power reactor construction permits*—(1) *Atomic Safety and Licensing Boards.*

(i) Atomic Safety and Licensing Boards shall hear and decide all issues that come before them, indicating in their decisions the type of licensing action, if any, which their decision would authorize. The Boards' decisions concerning construction permits shall not become effective until the Appeal Board and Commission actions outlined in paragraphs (e)(2) and (e)(3) of this section have taken place.

(ii) In reaching their decisions the Boards should interpret existing regulations and regulatory policies with due consideration to the implications for those regulations and policies of the Three Mile Island accident. As provided in paragraph (e)(3) of this section, in addition to taking generic rulemaking actions, the Commission will be providing case-by-case guidance on changes in regulatory policies in conducting its reviews in adjudicatory proceedings. The Boards shall, in turn, apply these revised regulations and policies in cases then pending before them to the extent that they are applicable. The Commission expects the Licensing Boards to pay particular attention in their decisions to analyzing the evidence on those safety and environmental issues arising under applicable Commission regulations and policies which the Boards believe present serious, close questions and which the Boards believe may be crucial to whether a license should become effective before full appellate review is completed. Furthermore, the Boards should identify any apects of the case which in their judgment, present issues on which prompt Commission policy guidance is called for. The Boards may request the assistance of the parties in identifying such policy issues but, absent specific Commission directives, such policy issues shall not be the subject of discovery, examination, or cross-examination.

(2) *Atomic Safety and Licensing Appeal Boards.* (i) Within sixty days of the service of any Licensing Board decision that would otherwise authorize issuance of a construction permit, the Appeal Board shall decide any stay motions that are timely filed.[1] For the purpose of this policy, a "stay" motion is one that seeks to defer the effectiveness of a Licensing Board decision beyond the period necessary for the Appeal Board and Commission action described herein. If no stay papers are filed, the Appeal Board shall, within the same time period (or earlier if possible), analyze the record and construction permit decision below on its own motion and decide whether a stay is warranted. It shall not, however, decide that a stay is warranted without giving the affected parties an opportunity to be heard.

(ii) In deciding these stay questions, the Appeal Board shall employ the procedures set out in 10 CFR 2.788. In addition to deciding the stay issue, the Appeal Board shall inform the Commission if it believes that the case raises issues on which prompt Commission policy guidance, particularly guidance on possible changes in present Commission regulations and policies, would advance the Board's appellate review. If the Appeal Board is unable to issue a decision within the sixty-day period, it should explain the cause of the delay to the Commission. The Commission shall thereupon either allow the Appeal Board the additional time necessary to complete its task or take other appropriate action, including taking the matter over itself. The running of the sixty-day period may not operate to make the Licensing Board decision effective. Unless otherwise ordered by the Commission, the Appeal Board shall conduct its normal appellate review of the Licensing Board decision after it has issued its decision on any stay request.

(3) *Commission.* (i) Reserving to itself the right to step in at any earlier stage of the proceeding, the Commission will, upon receipt of the Appeal Board decision on whether the effectiveness of a Licensing Board construction permit decision should be further delayed, review the matter on its own motion, applying the same criteria. The parties shall have no right to file pleadings with the Commission with regard to the Appeal Board's stay decision unless requested to do so.

(ii) The Commission will seek to issue a decision in each construction permit case within 20 days of receipt of the Appeal Board's stay decision. If the Commission does not act finally within that time, it will state the reason for its further consideration and indicate that time it anticipates will be required to reach its decision. In such an event, if the Appeal Board has not stayed the Licensing Board's decision, the initial decision will be considered stayed pending the Commission's decision.

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[1] Such motions shall be filed as provided by 10 CFR 2.788. No request need be filed with the Licensing Board prior to filing with the Appeal Board. Cf. Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-338, 4 NRC 10 (1976). The sixty-day period has been selected in recognition of two facts: first, allowing time for service by mail, close to thirty days may elapse before the Appeal Board has all the stay papers before it; second, the Appeal Board may find it necessary to hold oral argument.

(iii) In announcing the result of its review of any Appeal Board stay decision, the Commission may allow the proceeding to run its ordinary course or give whatever instructions as to the future handling of the proceeding it deems appropriate (for example, it may direct the Appeal Board to review the merits of particular issues in expedited fashion; furnish policy guidance with respect to particular issues; or decide to review the merits of particular issues itself, bypassing the Appeal Board).

(f) *Nuclear power reactor operating licenses*—(1) *Atomic Safety and Licensing Boards.* Atomic Safety and Licensing Boards shall hear and decide all issues that come before them, indicating in their decisions the type of licensing action, if any, which their decision would authorize. A Board's decision authorizing issuance of an operating license may not become effective insofar as it authorizes operating at greater than 5 percent of rated power until the Commission actions outlined below in paragraph (f)(2) of this section have taken place. Insofar as it authorizes operation up to 5 percent, the decision is effective and the Director shall issue the appropriate license in accordance with paragraph (b) of this section.

(ii) In reaching their decisions the Boards should interpret existing regulations and regulatory policies with due consideration to the implications for those regulations and policies of the Three Mile Island accident. In this regard it should be understood that as a result of analyses still under way the Commission may change its present regulations and regulatory policies in important respects and thus compliance with existing regulations may turn out to no longer warrant approval of a license application. As provided in paragraph (f)(2) of this section, in addition to taking generic rulemaking actions, the Commission will be providing case-by-case guidance on changes in regulatory policies in conducting its reviews in adjudicatory proceedings. The Boards shall, in turn, apply these revised regulations and policies in cases then pending before them to the extent that they are applicable. The Commission expects the Licensing Boards to pay particular attention in their decisions to analyzing the evidence on those safety and environmental issues arising under applicable Commission regulations and policies which the Boards believe present serious, close questions and which the Boards believe may be crucial to whether a license should become effective before full appellate review is completed. Furthermore, the Boards should identify any aspects of the case which in their judgment, present issues on which prompt Commission policy guidance is called for. The Boards may request the assistance of the parties in identifying such policy issues but, absent specific Commission directive, such policy issues shall not be the subject of discovery, examination, or cross-examination.

(2) *Commission.* (i) Reserving the power to step in at an earlier time, the Commission will, upon receipt of the Licensing Board decision authorizing issuance of an operating license, other than a decision authorizing only fuel loading and low power (up to 5 percent of rated power) testing, review the matter on its own motion to determine whether to stay the effectiveness of the decision. An operating license decision will be stayed by the Commission, insofar as it authorizes other than fuel loading and low power testing, if it determines that it is in the public interest to do so, based on a consideration of the gravity of the substantive issue, the likelihood that it has been resolved incorrectly below, the degree to which correct resolution of the issue would be prejudiced by operation pending review, and other relevant public interest factors.

(ii) For operating license decisions other than those authorizing only fuel loading and low power testing consistent with the target schedule set forth below, the parties may file brief comments with the Commission pointing out matters which, in their view, pertain to the immediate effectiveness issue. To be considered, such comments must be received within 10 days of the Board decision. However, the Commission may dispense with comments by so advising the parties. No extensive stay shall be issued without giving the affected parties an opportunity to be heard.

(iii) The Commission intends to issue a stay decision within 30 days of receipt of the Licensing Board's decision. The Licensing Board's initial decision will be considered stayed pending the Commission's decision insofar as it may authorize operations other than fuel loading and low power (up to 5 percent of rated power) testing.

(iv) In announcing a stay decision, the Commission may allow the proceeding to run its ordinary course or give instructions as to the future handling of the proceeding (for example, it may direct the Appeal Board to review the merits of particular issues in expedited fashion; furnish policy guidance with respect to particular issues; or decide to review the merits of particular issues itself, bypassing the Appeal Board). Furthermore, the Commission may in a particular case determine that compliance with existing regulations and policies may not longer be sufficient to warrant approval of a license application and may alter those regulations and policies.

(g) Unless the Commission otherwise explicitly so directs in its immediate effectiveness determination, no comment made in the course of the opinion or statement reflecting that determination is to be given any weight by the Atomic Safety and Licensing Board or Appeal Board in its consideration of either a stay motion pursuant to § 2.788(e) or an appeal on the merits pursuant to §§ 2.762 and 2.785, or in any subsequent formal adjudication. The Commission's effectiveness determination is entirely without prejudice to such consideration in subsequent proceedings.

[36 FR 828, Jan. 19, 1971, as amended at 45 FR 74711, Nov. 12, 1980; 46 FR 13978, Feb. 25, 1981; 46 FR 28628, May 28, 1981; 46 FR 47765, Sept. 30, 1981; 47 FR 2305, Jan. 15, 1982; 47 FR 40536, Sept. 15, 1982; 48 FR 52286, Nov. 17, 1983; 53 FR 31679, Aug. 19, 1988; 54 FR 7757, Feb. 23, 1989; 54 FR 14944, Apr. 14, 1989]

§ 2.765 Immediate effectiveness of initial decision directing issuance or amendment of licenses under Part 61 of this chapter.

An initial decision directing the issuance of a license under Part 61 of this chapter (relating to land disposal of radioactive waste) or any amendment to such a license authorizing actions which may significantly affect the health and safety of the public, will become effective only upon order of the Commission. The Director of Nuclear Material Safety and Safeguards may not issue a license under Part 61 of this chapter, or any amendment to such a license which may significantly affect the health and safety of the public, until expressly authorized to do so by the Commission.

[47 FR 57478, Dec. 27, 1982]

FINAL DECISION

§ 2.770 Final decision.

(a) The Commission will ordinarily consider the whole record on review, but may limit the issues to be reviewed and consider only findings and conclusions that were briefed after the filing of a notice of appeal.

(b) The Commission may adopt, modify, or set aside the findings, conclusions and order in the initial decision, and will state the basis of its action. The final decision will be in writing and will include:

(1) A statement of findings and conclusions, with the basis for them on all material issues of fact, law or discretion presented;

(2) All facts officially noticed;

(3) The ruling on each material issue; and

(4) The appropriate ruling, order, or denial of relief, with the effective date.

[27 FR 377, Jan. 13, 1962, as amended at 48 FR 52286, Nov. 17, 1983]

§ 2.771 Petition for reconsideration.

(a) A petition for reconsideration of a final decision may be filed by a party within ten (10) days after the date of the decision. No petition may be filed with respect to an initial decision

ich has become final through fail-
e to file a notice of appeal.
b) The petition for reconsideration
all state specifically the respects in
ich the final decision is claimed to
erroneous, the grounds of the peti-
n, and the relief sought. Within ten
)) days after a petition for reconsid-
ation has been filed, any other party
y file an answer in opposition to or
support of the petition. However.
e staff may file such an answer
thin twelve (12) days after a petition
r reconsideration has been filed.
c) Neither the filing nor the grant-
g of the petition shall stay the deci-
n unless the Commission orders
herwise.

FR 377, Jan. 13, 1962, as amended at 31
4340, Mar. 12, 1966; 43 FR 17802, Apr.
1978; 48 FR 52286, Nov. 17, 1983]

.772 Authority of the Secretary to rule on procedural matters.

When briefs, motions or other
pers listed herein are submitted to
e Commission itself, as opposed to
ficers who have been delegated au-
ority to act for the Commission, the
cretary or the Assistant Secretary
e authorized to:
a) Prescribe schedules for the filing
briefs, motions, or other pleadings,
here such schedules may differ from
ose elsewhere prescribed in these
les or where these rules do not pre-
ribe a schedule;
b) Rule on motions for extensions
time;
c) Reject motions, briefs, pleadings,
d other documents filed with the
ommission later than the time pre-
ribed by the Secretary or the Assist-
t Secretary or established by an
der, rule, or regulation of the Com-
ission unless good cause is shown for
e late filing;
(d) Prescribe all procedural arrange-
ents relating to any oral argument
be held before the Commission;
(e) Extend the time for the Commis-
on to rule on a petition for review
nder 10 CFR 2.786(b);
(f) Extend the time for the Commis-
on to grant review on its own motion
nder 10 CFR 2.786(a);
(g) Extend time for Commission
view on its own motion of a Direc-
r's denial under 10 CFR 2.206(c);

(h) Direct pleadings improperly filed before the Commission to the appropriate adjudicatory board for action;

(i) Deny a request for hearings, where the request fails to comply with the Commission's pleading requirements set forth in this part, and fails to set forth an arguable basis for further proceedings;

(j) Refer to the Atomic Safety and Licensing Board Panel or an Administrative Law Judge, as appropriate, requests for hearings not falling under § 2.104 of this part, where the requester is entitled to further proceedings; and

(k) Take action on minor procedural matters.

[39 FR 24219, July 1, 1974, as amended at 43 FR 22346, May 25, 1978; 46 FR 34794, July 6, 1981; 47 FR 47803, Sept. 28, 1982]

RESTRICTED COMMUNICATIONS

§ 2.780 Ex parte communications.

In any proceeding under this subpart—

(a) Interested persons outside the agency may not make or knowingly cause to be made to any Commission adjudicatory employee, any ex parte communication relevant to the merits of the proceeding.

(b) Commission adjudicatory employees may not request or entertain from any interested person outside the agency or make or knowingly cause to be made to any interested person outside the agency, and ex parte communication relevant to the merits of the proceeding.

(c) Any Commission adjudicatory employee who receives, makes, or knowingly causes to be made a communication prohibited by this section shall ensure that it and any responses to the communication promptly are served on the parties and placed in the public record of the proceeding. In the case of oral communications, a written summary must be served and placed in the public record of the proceeding.

(d) Upon receipt of a communication knowingly made or knowingly caused to be made by a party in violation of this section, the Commission or other adjudicatory employee presiding in a proceeding may, to the extent consistent with the interests of justice and the policy of the underlying statutes, require the party to show cause why its claim or interest in the proceeding should not be dismissed, denied, disregarded, or otherwise adversely affected on account of the violation.

(e) (1) The prohibitions of this section apply—

(i) When a notice of hearing or other comparable order is issued in accordance with §§ 2.104(a), 2.105(e)(2), 2.202(c), 2.204, 2.205(e), or 2.703; or

(ii) Whenever the interested person or Commission adjudicatory employee responsible for the communication has knowledge that a notice of hearing or other comparable order will be issued in accordance with §§ 2.104(a), 2.105(e)(2), 2.202(c), 2.204, 2.205(e), or 2.703.

(2) The prohibitions of this section cease to apply to ex parte communications relevant to the merits of a full or partial initial decision when, in accordance with § 2.786, the time has expired for Commission review of the Atomic Safety and Licensing Appeal Board's decisions on the full or partial initial decision.

(f) The prohibitions in this section do not apply to—

(1) Requests for and the provision of status reports;

(2) Communications specifically permitted by statute or regulation;

(3) Communications made to or by Commission adjudicatory employees in the Office of the General Counsel regarding matters pending before a court or another agency; and

(4) Communications regarding generic issues involving public health and safety or other statutory responsibilities of the agency (e.g., rulemakings, congressional hearings on legislation, budgetary planning) not associated with the resolution of any proceeding under this subpart pending before the NRC.

[53 FR 10365, Mar. 31, 1988]

§ 2.781 Separation of functions.

(a) In any proceeding under this subpart, any NRC officer or employee engaged in the performance of any investigative or litigating function in that proceeding or in a factually related proceeding may not participate in or advise a Commission adjudicatory employee about the intitial or final decision on any disputed issue in that proceeding, except—

(1) As witness or counsel in the proceeding;

(2) Through a written communication served on all parties and made on the record of the proceeding; or

(3) Through an oral communication made both with reasonable prior notice to all parties and with reasonable opportunity for all parties to respond.

(b) The prohibition in paragraph (a) of this section does not apply to—

(1) Communications to or from any Commission adjudicatory employee regarding—

(i) The status of a proceeding;

(ii) Matters with regard to which the communications specifically are permitted by statute or regulation;

(iii) Agency participation in matters pending before a court or another agency; or

(iv) Generic issues involving public health and safety or other statutory responsibilities of the agency (e.g., rulemakings, congressional hearings on legislation, budgetary planning) not associated with the resolution of any proceeding under this subpart pending before the NRC.

(2) Communications to or from Commissioners, members of their personal staffs, Commission adjudicatory employees in the Office of the General Counsel, and the Secretary and employees of the Office of the Secretary, regarding—

(i) Initiation or direction of an investigation or initiation of an enforcement proceeding;

(ii) Supervision of agency staff to ensure compliance with the general policies and procedures of the agency;

(iii) Staff priorities and schedules or the allocation of agency resources; or

(iv) General regulatory, scientific, or engineering principles that are useful for an understanding of the issues in a proceeding and are not contested in the proceeding.

(3) None of the communications permitted by paragraph (b)(2) (i) through (iii) of this section is to be associated by the Commission adjudicatory employee or the NRC officer or employee

erforming investigative or litigating unctions with the resolution of any roceeding under this subpart pending efore the NRC.

(c) Any Commission adjudicatory mployee who receives a communication prohibited under paragraph (a) of his section shall ensure that it and ny responses to the communication re placed in the public record of the roceeding and served on the parties. n the case of oral communications, a written summary must be served and laced in the public record of the proceeding.

(d)(1) The prohibitions in this section apply—

(i) When a notice of hearing or other comparable order is issued in accordance with §§ 2.104(a), 2.105(e)(2), 2.202(c), 2.204, 2.205(e), or 2.703; or

(ii) Whenever an NRC officer or employee who is or has reasonable cause to believe he or she will be engaged in the performance of an investigative or litigating function or a Commission adjudicatory employee has knowledge that a notice of hearing or other comparable order will be issued in accordance with §§ 2.104(a), 2.105(e)(2), 2.202(c), 2.204, 2.205(e), or 2.703.

(2) The prohibitions of this section will cease to apply to the disputed issues pertinent to a full or partial initial decision when, in accordance with § 2.786, the time has expired for Commission review of the Appeal Board's decision on the full or partial initial decision.

(e) Communications to, from, and between Commission adjudicatory employees not prohibited by this section may not serve as a conduit for a communication that otherwise would be prohibited by this section or for an ex parte communication that otherwise would be prohibited by § 2.780.

(f) If an initial or final decision is stated to rest in whole or in part on fact or opinion obtained as a result of a communication authorized by this section, the substance of the communication must be specified in the record of the proceeding and every party must be afforded an opportunity to controvert the fact or opinion. If the parties have not had an opportunity to controvert the fact or opinion prior to the filing of the decision, a party may controvert the fact or opinion by filing an appeal from an initial decision, or a petition for reconsideration of a final decision that clearly and concisely sets forth the information or argument relied on to show the contrary. If appropriate, a party may be afforded the opportunity for cross-examination or to present rebuttal evidence.

[53 FR 10366, Mar. 31, 1988]

ATOMIC SAFETY AND LICENSING APPEAL BOARD

§ 2.785 Functions of Atomic Safety and Licensing Appeal Board.

(a) The Commission has authorized Atomic Safety and Licensing Appeal Boards to exercise the authority and perform the review functions which would otherwise have been exercised and performed by the Commission, including, but not limited to, those under §§ 2.760 through 2.771, 2.912, and 2.913 in (1) proceedings conducted pursuant to Subpart G of this part and (2) such other proceedings as the Commission may specify.

(b)(1) In the proceedings described in paragraph (a) of this section, the Atomic Safety and Licensing Appeal Board will also exercise the authority and perform the functions which would otherwise have been exercised and performed by the Commission under §§ 2.711, 2.717(a), 2.718(i), 2.720(f), 2.730, 2.742(b), 2.743(b), 2.752 (a) and (c) and Subpart I, except those functions referred to in § 2.905(c), (e)(2), (g), and (h)(2).

(2) In a proceeding on an application for an operating license where the Atomic Safety and Licensing Appeal Board determines that a serious safety, environmental, or common defense and security matter exists that has not been raised by the parties, it may give appropriate consideration to that matter.

(c) In the proceedings described in paragraph (a) of this section, the Atomic Safety and Licensing Appeal Board shall exercise the authority and perform the functions delegated to it subject to the provisions and limitations of the referenced sections and subpart. Except as provided in § 2.786, any action taken by the Atomic Safety and Licensing Appeal Board pursuant to its delegated authority shall have the same force and effect and shall be made, evidenced, and enforced in the same manner as actions of the Commission.

(d) In the proceedings described in paragraph (a) of this section, an Atomic Safety and Licensing Appeal Board may, either in its discretion or on direction of the Commission, certify to the Commission for its determination major or novel questions of policy, law or procedure.

NOTE: Pending completion of the Commission's ongoing rulemaking proceeding for establishing procedures for direct Commission review of initial decisions, i.e., until the effective date of a final rule, the authorization of Atomic Safety and Licensing Appeal Boards to exercise the authority and perform the review functions which would otherwise be exercised and performed by the Commission is restricted as set forth in paragraphs (a) and (b) of this note, notwithstanding any provisions of this regulation to the contrary.

(a) Appeal boards are authorized to decide all appeals and other appellate and related matters (including appeals from initial decisions, interlocutory appeals and motions, certified questions, referrals and petitions for directed certification) pending before an appeal board on October 24, 1990.

(b) Appeal boards are not authorized to decide appeals and other appellate and related matters filed in the period beginning October 25, 1990, and ending on the effective date of a final rule in the rulemaking proceeding referred to above, unless a filing is closely related to a matter currently pending before an appeal board. Appeals and other appellate and related matters filed in this period will be decided by the Commission under current regulations. The appeal board should decide in the first instance whether papers filed with it should be referred to the Commission under the terms of this Note.

[34 FR 13361, Aug. 19, 1969, as amended at 37 FR 22792, Oct. 25, 1972; 40 FR 2974, Jan. 17, 1975; 40 FR 8777, Mar. 3, 1975; 41 FR 53328, Dec. 6, 1976; 44 FR 67089, Nov. 23, 1979; 52 FR 2993, Jan. 30, 1987; 55 FR 42945, Oct. 24, 1990]

§ 2.786 Review of decisions and actions of an Atomic Safety and Licensing Appeal Board.

(a) Within forty (40) days after the date of a decision or action by an Atomic Safety and Licensing Appeal Board under § 2.785, or within thirty (30) days after a petition for review of such decision or action has been filed under paragraph (b) of this section, the Commission may, in cases of exceptional legal or policy importance, review the decision or action on its own motion.

(b)(1) Within fifteen (15) days after service of a decision or action by an Atomic Safety and Licensing Appeal Board under § 2.785 other than a decision or action on a referral or certification under §§ 2.718(i) or 2.730(f), a party may file a petition for review with the Commission on the ground that the decision or action is erroneous with respect to an important question of fact, law, or policy.

(2) A petition for review under this paragraph shall be no longer than ten (10) pages, and shall contain the following:

(i) A concise summary of the decision or action of which review is sought;

(ii) A statement (including record citation) where the matters of fact or law raised in the petition for review were previously raised before the Atomic Safety and Licensing Appeal Board and, if they were not why they could not have been raised;

(iii) A concise statement why in the petitioner's view the decision or action is erroneous; and

(iv) A concise statement why Commission review should be exercised.

(3) Any other party to the proceeding may, within ten (10) days after service of a petition for review, file an answer opposing Commission review. Such an answer shall be no longer than ten (10) pages and should concisely address the matters in paragraph (b)(2) of this section to the extent appropriate. No answer in support of a petition for review or further replies to answers will be entertained by the Commission.

(4) The grant or denial of a petition for review is within the discretion of the Commission, except that:

(i) A petition for review of matters of law or policy will not ordinarily be granted unless it appears the case involves an important matter that could significantly affect the environment, the public health and safety, or the common defense and security, constitutes an important antitrust question, involves an important procedural issue, or otherwise raises important questions of public policy;

(ii) A petition for review of matters of fact will not be granted unless it appears that the Atomic Safety and Licensing Appeal Board has resolved a factual issue necessary for decision in a clearly erroneous manner contrary to the resolution of that same issue by the Atomic Safety and Licensing Board;

(iii) A petition for review will not be granted to the extent that it relies on matters that could have been but were not raised before the Atomic Safety and Licensing Appeal Board. A matter raised sua sponte by an Appeal Board has been raised before the Appeal Board for the purpose of this section; and

(iv) A petition for review will not be granted as to issues raised before the Atomic Safety and Licensing Appeal Board on a pending motion for reconsideration.

(5) If within thirty (30) days after the filing of a petition for review the Commission does not grant the petition, in whole or in part, the petition shall be deemed denied, unless the Commission in its discretion extends the time for its consideration of the petition and any answers thereto.

(6) If a petition for review is granted, the Commission may issue an order specifying the issues to be reviewed and designating the parties to the review proceeding and direct that appropriate briefs be filed, oral argument be held, or both.

(7) Petitions for reconsideration of Commission decisions upon review, or granting or denying review in whole or in part, will not be entertained.

(8) Neither the filing nor the granting of a petition for review will stay the effect of the decision or action of the Atomic Safety and Licensing Appeal Board, unless otherwise ordered by the Commission.

(9) Except as provided in this section and § 2.788, no petition or other request for Commission review of a decision or action of an Atomic Safety and Licensing Appeal Board will be entertained.

[42 FR 22129, May 2, 1977, as amended at 45 FR 45890, July 8, 1980; 45 FR 73466, Nov. 5, 1980]

§ 2.787 Composition of Atomic Safety and Licensing Appeal Boards.

(a) An Atomic Safety and Licensing Appeal Board is composed of three members, possessing qualifications deemed appropriate to the issues to be decided, assigned for each proceeding from the Atomic Safety and Licensing Appeal Panel. Members shall be assigned by the permanent Chairman of the Panel or, in his or her absence, by the most senior available full-time member of the Appeal Panel. For purposes of this section, seniority will be determined according to the date of appointment as a member of the Atomic Safety and Licensing Appeal Panel. The Chairman of an Appeal Board for a particular proceeding shall be qualified in the conduct of administrative proceedings. An alternate may be assigned to serve as a member of an Atomic Safety and Licensing Appeal Board for a particular proceeding in the event that a member asigned to such proceeding becomes unavailable.

(b) In the absence of a quorum, the following individuals are authorized to act for an Appeal Board on procedural matters, including requests for stays of orders by presiding officers:

(1) The Chairman of the Appeal Board assigned for a particular proceeding;

(2) The permanent Chairman of the Atomic Safety and Licensing Appeal Panel, in the event that the Chairman for a particular proceeding is not available to act upon the matter in question, or has not been assigned.

(3) The most senior available full-time member of the Appeal Panel, in the event that (i) the Chairman for a particular proceeding is unavailable or has not been assigned, and (ii) the permanent Chairman of the Appeal Panel is unavailable or the position is vacant.

(c)(1) Except with respect to requests for stays of orders of presiding officers, action by a designated individual under the authority of paragraph (b) of this section shall be reviewable by the Appeal Board for the particular proceeding, upon its own motion or upon a motion filed within three (3) days of the date of the particular action in accordance with § 2.730.

(2) Action under the authority of paragraph (b) of this section with respect to requests for stays of orders of presiding officers shall be reviewable by the Commission, upon its own motion or upon a motion filed within three (3) days of the date of the particular action in accordance with § 2.730.

[49 FR 24110, June 12, 1984]

§ 2.788 Stays of decisions of presiding officers and Atomic Safety and Licensing Appeal Boards pending review.

(a) Within ten (10) days after service of a decision or action any party to the proceeding may file an application for a stay of the effectiveness of the decision or action pending filing of and a decision on an appeal or petition for review. Except as provided in paragraph (f) of this section, such an application may be filed with the Commission, Atomic Safety and Licensing Appeal Board, or the presiding officer.

(b) An application for a stay shall be no longer than ten (10) pages, exclusive of affidavits, and shall contain the following:

(1) A concise summary of the decision or action which is requested to be stayed;

(2) A concise statement of the grounds for stay, with reference to the factors specified in paragraph (e) of this section;

(3) In the case of an application to the Commission for stay of decisions or actions by an Atomic Safety and Licensing Appeal Board, a statement where (including record citation, if available) a stay was requested from the Appeal Board and denied. If no such request was made of the Appeal Board, the application should state why it could not have been made; and

(4) To the extent that an application for a stay relies on facts subject to dispute, appropriate references to the record or affidavits by knowledgeable persons.

(c) Service of an application for a stay on the other parties shall be by the same method, e.g. telegram, mail, as the method for filing the application with the Commission, Atomic Safety and Licensing Appeal Board, or the presiding officer.

(d) Within ten (10) days after service of an application for a stay under this section, any party may file an answer supporting or opposing the granting of a stay. Such answer shall be no longer than ten (10) pages, exclusive of affidavits, and should concisely address the matters in paragraph (b) of this section to the extent appropriate. No further replies to answers will be entertained. Filing of and service of an answer on the other parties shall be by the same method, e.g. telegram, mail, as the method for filing the application for the stay.

(e) In determining whether to grant or deny an application for a stay, the Commission, Atomic Safety and Licensing Appeal Board, or presiding officer will consider:

(1) Whether the moving party has made a strong showing that it is likely to prevail on the merits;

(2) Whether the party will be irreparably injured unless a stay is granted;

(3) Whether the granting of a stay would harm other parties; and

(4) Where the public interest lies.

(f) An application to the Commission for a stay of a decision or action by an Atomic Safety and Licensing Appeal Board will be denied if a stay was not, but could have been, sought before the Appeal Board. An application for a stay of a decision or action of a presiding officer may be filed before either the Atomic Safety and Licensing Appeal Board or the presiding officer, but not both at the same time.

(g) In extraordinary cases, where prompt application is made under this section, the Commission, Atomic Safety and Licensing Appeal Board, or presiding officer may grant a temporary stay to preserve the status quo without waiting for filing of any answer. The application may be made orally provided the application is promptly confirmed by telegram. Any party applying under this paragraph shall make all reasonable efforts to inform the other parties of the application, orally if made orally.

(h) A party may file an application for a stay of a decision or action granting or denying a stay. As to a decision or action of a presiding officer the application shall be filed with the Atomic Safety and Licensing Appeal Board. As to a decision or action of the Atomic Safety and Licensing Appeal Board the application shall be filed with the Commission. In each case the procedures and criteria of paragraphs (a) through (e) of this section shall be followed.

NOTE: Pending completion of the Commission's ongoing rulemaking proceeding establishing procedures for direct Commission review of initial decisions, requests for stays of decisions of presiding officers shall not be filed with an Atomic Safety and Licensing Appeal Board in the period beginning October 25, 1990, unless a stay request is related closely to a matter currently pending before an appeal board.

[42 FR 22130, May 2, 1977, as amended at 43 FR 17802, Apr. 26, 1978; 55 FR 42945, Oct. 24, 1990]

AVAILABILITY OF OFFICIAL RECORDS

§ 2.790 Public inspections, exemptions, requests for withholding.

(a) Subject to the provisions of paragraphs (b), (d), and (e) of this section, final NRC records and documents,[*] including but not limited to correspondence to and from the NRC regarding the issuance, denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, or order, or regarding a rule making proceeding subject to this part shall not, in the absence of a compelling reason for nondisclosure after a balancing of the interests of the person or agency urging nondisclosure and the public interest in disclosure, be exempt from disclosure and will be made available for inspection and copying in the NRC Public Document Room, except for matters that are:

(1)(i) Specifically authorized under criteria established by an Executive order to be kept secret in the interest of national defense or foreign policy and (ii) are in fact properly classified pursuant to such Executive order;

(2) Related solely to the internal personnel rules and practices of the Commission;

(3) Specifically exempted from disclosure by statute (other than 5 U.S.C.) 552(b), provided that such statute (i) requires that the matters be withheld from the public in such a manner as to leave no discretion on the issue, or (ii) establishes particular criteria for withholding or refers to particular types or matters to be withheld.

(4) Trade secrets and commercial or financial information obtained from a person and privileged or confidential;

(5) Interagency or intraagency memorandums or letters which would not be available by law to a party other than an agency in litigation with the Commission;

(6) Personnel and medical files and similar files, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy;

(7) Records or information compiled for law enforcement purposes, but only to the extent that the production of such law enforcement records or information.

(i) Could reasonably be expected to interfere with enforcement proceedings;

(ii) Would deprive a person of a right to a fair trial or an impartial adjudication;

(iii) Could reasonably be expected to constitute an unwarranted invasion of personal privacy;

(iv) Could reasonably be expected to disclose the identity of a confidential source, including a State, local, or foreign agency or authority, or any private institution which furnished information on a confidential basis, and, in the case of a record or information compiled by a criminal law enforcement authority in the course of a criminal investigation, or by an agency conducting a lawful national security intelligence investigation, information furnished by a confidential source;

(v) Would disclose techniques and procedures for law enforcement investigations or prosecutions, or would disclose guidelines for law enforcement investigations or prosecutions if such disclosure could reasonably be expected to risk circumvention of the law; or

(vi) Could reasonably be expected to endanger the life or physical safety of any individual;

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[*] Such records and documents do not include handwritten notes and drafts.

(8) Contained in or related to examination, operating, or condition reports prepared by, on behalf of, or for the use of an agency responsible for the regulation or supervision of financial institutions; or

(9) Geological and geophysical information and data, including maps, concerning wells.

(b)(1) A person who proposes that a document or a part be withheld in whole or part from public disclosure on the ground that it contains trade secrets or privileged or confidential commercial or financial information shall submit an application for withholding accompanied by an affidavit which:

(i) Identifies the document or part sought to be withheld and the position of the person making the affidavit, and

(ii) Contains a full statement of the reasons on the basis of which it is claimed that the information should be withheld from public disclosure. Such statement shall address with specificity the considerations listed in paragraph (b)(4) of this section. In the case of an affidavit submitted by a company, the affidavit shall be executed by an officer or upper-level management official who has been specifically delegated the function of reviewing the information sought to be withheld and authorized to apply for its withholding on behalf of the company. The affidavit shall be executed by the owner of the information, even though the information sought to be withheld is submitted to the Commission by another person. The application and affidavit shall be submitted at the time of filing the information sought to be withheld. The information sought to be withheld shall be incorporated, as far as possible, into a separate paper. The affiant may designate with appropriate markings information submitted in the affidavit as a trade secret or confidential or privileged commercial or financial information within the meaning of § 9.17(a)(4) of this chapter and such information shall be subject to disclosure only in accordance with the provisions of § 9.19 of this chapter.

(2) A person who submits commercial or financial information believed to be privileged or confidential or a trade secret shall be on notice that it is the policy of the Commission to achieve an effective balance between legitimate concerns for protection of competitive positions and the right of the public to be fully apprised as to the basis for and effects of licensing or rule making actions, and that it is within the discretion of the Commission to withhold such information from public disclosure.

(3) The Commission shall determine whether information sought to be withheld from public disclosure pursuant to this paragraph: (i) is a trade secret or confidential or privileged commercial or financial information; and (ii) if so, should be withheld from public disclosure.

(4) In making the determination required by paragraph (b)(3)(i) of this section, the Commission will consider:

(i) Whether the information has been held in confidence by its owner;

(ii) Whether the information is of a type customarily held in confidence by its owner and whether there is a rational basis therefor;

(iii) Whether the information was transmitted to and received by the Commission in confidence;

(iv) Whether the information is available in public sources;

(v) Whether public disclosure of the information sought to be withheld is likely to cause substantial harm to the competitive position of the owner of the information, taking into account the value of the information to the owner; the amount of effort or money, if any, expended by the owner in developing the information; and the ease or difficulty with which the information could be properly acquired or duplicated by others.

(5) If the Commission determines, pursuant to paragraph (b)(4) of this section, that the record or document contains trade secrets or privileged or confidential commercial or financial information, the Commission will then determine (i) whether the right of the public to be fully apprised as to the bases for and effects of the proposed action outweighs the demonstrated concern for protection of a competitive position and (ii) whether the information should be withheld from

public disclosure pursuant to this paragraph. If the record or document for which withholding is sought is deemed by the Commission to be irrelevant or unnecessary to the performance of its functions, it shall be returned to the applicant.

(6) Withholding from public inspection shall not affect the right, if any, of persons properly and directly concerned to inspect the document. The Commission may require information claimed to be a trade secret or privileged or confidential commercial or financial information to be subject to inspection: (i) Under a protective agreement, by contractor personnel or government officials other than NRC officials; (ii) by the presiding officer in a proceeding; and (iii) under protective order, by parties to a proceeding, pending a decision of the Commission on the matter of whether the information should be made publicly available or when a decision has been made that the information should be withheld from public disclosure. In camera sessions of hearings may be held when the information sought to be withheld is produced or offered in evidence. If the Commission subsequently determines that the information should be disclosed, the information and the transcript of such in camera session will be made publicly available.

(c) If a request for withholding pursuant to paragraph (b) of this section is denied, the Commission will notify an applicant for withholding of the denial with a statement of reasons. The notice of denial will specify a time, not less than thirty (30) days after the date of the notice, when the document will be placed in the Public Document Room. If, within the time specified in the notice, the applicant requests withdrawal of the document, the document will not be placed in the Public Document Room and will be returned to the applicant: Provided, That information submitted in a rule making proceeding which subsequently forms the basis for the final rule will not be withheld from public disclosure by the Commission and will not be returned to the applicant after denial of any application for withholding submitted in connection with that information. If a request for withholding pursuant to paragraph (b) of this section is granted, the Commission will notify the applicant of its determination to withhold the information from public disclosure.

(d) The following information shall be deemed to be commercial or financial information within the meaning of § 9.17(a)(4) of this chapter and shall be subject to disclosure only in accordance with the provisions of § 9.19 of this chapter.

(1) Correspondence and reports to or from the NRC which contain information or records concerning a licensee's or applicant's physical protection or material control and accounting program for special nuclear material not otherwise designated as Safeguards Information or classified as National Security Information or Restricted Data.

(2) Information submitted in confidence to the Commission by a foreign source.

(e) The presiding officer, if any, or the Commission may, with reference to the NRC records and documents made available pursuant to this section, issue orders consistent with the provisions of this section and § 2.740(c).

[41 FR 11810, Mar. 22, 1976, as amended at 42 FR 12877, Mar. 7, 1977; 52 FR 49355, Dec. 31, 1987; 53 FR 17688, May 18, 1988]

Subpart H—Rulemaking

§ 2.800 Scope of rulemaking.

This subpart governs the issuance, amendment and repeal of regulations in which participation by interested persons is prescribed under section 553 of Title 5 of the U.S. Code.

[35 FR 11459, July 17, 1970]

§ 2.801 Initiation of rulemaking.

Rulemaking may be initiated by the Commission at its own instance, on the recommendation of another agency of the United States, or on the petition of any other interested person.

§ 2.802 Petition for rulemaking.

(a) Any interested person may petition the Commission to issue, amend or rescind any regulation. The petition should be addressed to the Secretary, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Chief, Docketing and Service Branch.

(b) A prospective petitioner is encouraged to confer with the staff prior to the filing of a petition for rulemaking. Questions regarding applicable NRC regulations sought to be amended, the procedures for filing a petition for rulemaking, or requests for a meeting with the appropriate NRC staff to discuss a petition should be addressed to the Director, Division of Freedom of Information and Publications Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Chief, Regulatory Publications Branch. A prospective petitioner may also telephone the Division of Freedom of Information and Publications Services on 301-492-7086 or Toll Free on 800-368-5642.

(c) Each petition filed under this section shall:

(1) Set forth a general solution to the problem or the substance or text of any proposed regulation or amendment, or specify the regulation which is to be revoked or amended;

(2) State clearly and concisely the petitioner's grounds for and interest in the action requested;

(3) Include a statement in support of the petition which shall set forth the specific issues involved, the petitioner's views or arguments with respect to those issues, relevant technical, scientific or other data involved which is reasonably available to the petitioner, and such other pertinent information as the petitioner deems necessary to support the action sought. In support of its petition, petitioner should note any specific cases of which petitioner is aware where the current rule is unduly burdensome, deficient, or needs to be strengthened.

(d) The petitioner may request the Commission to suspend all or any part of any licensing proceeding to which the petitioner is a party pending disposition of the petition for rulemaking.

(e) If it is determined that the petition includes the information required by paragraph (c) of this section and is complete, the Director, Division of Freedom of Information and Publications Services, or designee, will assign a docket number to the petition, will cause the petition to be formally docketed, and will deposit a copy of the docketed petition in the Commission's Public Document Room. Public comment may be requested by publication of a notice of the docketing of the petition in the FEDERAL REGISTER, or, in appropriate cases, may be invited for the first time upon publication in the FEDERAL REGISTER of a proposed rule developed in response to the petition. Publication will be limited by the requirements of section 181 of the Atomic Energy Act of 1954, as amended, and may be limited by order of the Commission.

(f) If it is determined by the Executive Director for Operations that the petition does not include the information required by paragraph (c) of this section and is incomplete, the petitioner will be notified of that determination and the respects in which the petition is deficient and will be accorded an opportunity to submit additional data. Ordinarily this determination will be made within 30 days from the date of receipt of the petition by the Office of the Secretary of the Commission. If the petitioner does not submit additional data to correct the deficiency within 90 days from the date of notification to the petitioner that the petition is incomplete, the petition may be returned to the petitioner without prejudice to the right of the petitioner to file a new petition.

(g) The Director, Division of Freedom of Information and Publications Services, Office of Administration, will prepare on a quarterly basis a summary of petitions for rulemaking before the Commission, including the status of each petition. A copy of the report will be available for public inspection and copying for a fee in the Commission's Public Document Room, 2120 L Street, NW., Washington, DC.

[44 FR 61322, Oct. 25, 1979, as amended at 46 FR 35487, July 9, 1981; 52 FR 31609, Aug. 21, 1987; 53 FR 43419, Oct. 27, 1988; 53 FR 52993, Dec. 30, 1988; 54 FR 53315, Dec. 28, 1989]

§ 2.803 Determination of petition.

No hearing will be held on the petition unless the Commission deems it advisable. If the Commission determines that sufficient reason exists, it will publish a notice of proposed rulemaking. In any other case, it will deny the petition and will notify the petitioner with a simple statement of the grounds of denial.

§ 2.804 Notice of proposed rulemaking.

(a) Except as provided by paragraph (d) of this section, when the Commission proposes to adopt, amend, or repeal a regulation, it will cause to be published in the FEDERAL REGISTER a notice of proposed rulemaking, unless all persons subject to the notice are named and either are personally served or otherwise have actual notice in accordance with law.

(b) The notice will include:

(1) Either the terms or substance of the proposed rule, or a specification of the subjects and issues involved;

(2) The manner and time within which interested members of the public may comment, and a statement that copies of comments may be examined in the Public Document Room;

(3) The authority under which the regulation is proposed;

(4) The time, place, and nature of the public hearing, if any;

(5) If a hearing is to be held, designation of the presiding officer and any special directions for the conduct of the hearing; and

(6) Such explanatory statement as the Commission may consider appropriate.

(c) The publication or service of notice will be made not less than fifteen (15) days prior to the time fixed for hearing, if any, unless the Commission for good cause stated in the notice provides otherwise.

(d) The notice and comment provisions contained in paragraphs (a), (b), and (c) of this section will not be required to be applied—

(1) To interpretative rules, general statements of policy, or rules of agency organization, procedure, or practice; or

(2) When the Commission for good cause finds that notice and public comment are impracticable, unnecessary, or contrary to the public interest, and are not required by statute. This finding, and the reasons therefor, will be incorporated into any rule issued without notice and comment for good cause.

(e) The Commission shall provide for a 30-day post-promulgation comment period for—

(1) Any rule adopted without notice and comment under the good cause exception on paragraph (d)(2) of this section where the basis is that notice and comment is "impracticable" or "contrary to the public interest."

(2) Any interpretative rule, or general statement of policy adopted without notice and comment under paragraph (d)(1) of this section, except for those cases for which the Commission finds that such procedures would serve no public interest, or would be so burdensome as to outweigh any foreseeable gain.

(f) For any post-promulgation comments received under paragraph (e) of this section, the Commission shall publish a statement in the FEDERAL REGISTER containing an evaluation of the significant comments and any revisions of the rule or policy statement made as a result of the comments and their evaluation.

[27 FR 377, Jan. 13, 1962, as amended at 50 FR 13010, Apr. 2, 1985]

§ 2.805 Participation by interested persons.

(a) In all rulemaking proceedings conducted under the provisions of § 2.804(a), the Commission will afford interested persons an opportunity to participate through the submission of statements, information, opinions, and arguments in the manner stated in the notice. The Commission may grant additional reasonable opportunity for the submission of comments.

(b) The Commission may hold informal hearings at which interested persons may be heard, adopting procedures which in its judgment will best serve the purpose of the hearing.

[27 FR 377, Jan. 13, 1962, as amended at 50 FR 13010, Apr. 2, 1985; 50 FR 15865, Apr. 22, 1985]

§ 2.806 Commission action.

The Commission will incorporate in the notice of adoption of a regulation a concise general statement of its basis and purpose, and will cause the notice and regulation to be published in the FEDERAL REGISTER or served upon affected persons.

§ 2.807 Effective date.

The notice of adoption of a regulation will specify the effective date. Publication or service of the notice and regulation, other than one granting or recognizing exemptions or relieving from restrictions, will be made not less than thirty (30) days prior to the effective date unless the Commission directs otherwise on good cause found and published in the notice of rule making.

§ 2.808 Authority of the Secretary to rule on procedural matters.

When briefs, motions or other papers listed herein are submitted to the Commission itself, as opposed to officers who have been delegated authority to act for the Commission, the Secretary or the Assistant Secretary are authorized to:

(a) Prescribe schedules for the filing of statements, information, briefs, motions, responses or other pleadings, where such schedules may differ from those elsewhere prescribed in these rules or where these rules do not prescribe a schedule;

(b) Rule on motions for extensions of time;

(c) Reject motions, briefs, pleadings, and other documents filed with the Commission later than the time prescribed by the Secretary or the Assistant Secretary or established by an order, rule, or regulation of the Commission unless good cause is shown for the late filing; and

(d) Prescribe all procedural arrangements relating to any oral argument to be held before the Commission.

[39 FR 24219, July 1, 1974]

§ 2.809 Participation by the Advisory Committee on Reactor Safeguards.

(a) In its advisory capacity to the Commission, the ACRS may recommend that the Commission initiate rulemaking in a particular area. The Commission will respond to such rulemaking recommendation in writing within 90 days, noting its intent to implement, study, or defer action on the recommendation. In the event the Commission decides not to accept or decides to defer action on the recommendation, it will give its reasons for doing so. Both the ACRS recommendation and the Commission's response will be placed in the NRC Public Document Room following transmittal of the Commission's response to the ACRS.

(b) When a rule involving nuclear safety matters within the purview of the ACRS is under development by the NRC Staff, the Staff will ensure that the ACRS is given an opportunity to provide advice at appropriate stages and to identify issues to be considered during rulemaking hearings.

[46 FR 22358, Apr. 17, 1981]

Subpart I—Special Procedures Applicable to Adjudicatory Proceedings Involving Restricted Data and/or National Security Information

SOURCE: 41 FR 53329, Dec. 6, 1976, unless otherwise noted.

§ 2.900 Purpose.

This subpart is issued pursuant to section 181 of the Atomic Energy Act of 1954, as amended, and section 201 of the Energy Reorganization Act of 1974, as amended, to provide such procedures in proceedings subject to this part as will effectively safeguard and prevent disclosure of Restricted Data and National Security Information to unauthorized persons, with minimum impairment of procedural rights.

§ 2.901 Scope.

This subpart applies to all proceedings subject to Subpart G.

§ 2.902 Definitions.

As used in this subpart:

(a) "Government agency" means any executive department, commission, independent establishment, corporation, wholly or partly owned by the United

States of America, which is an instrumentality of the United States, or any board, bureau, division, service, office, officer, authority, administration, or other establishment in the executive branch of the Government.

(b) "Interested party" means a party having an interest in the issue or issues to which particular Restricted Data or National Security Information is relevant. Normally the interest of a party in an issue may be determined by examination of the notice of hearing, the answers and replies.

(c) The phrase "introduced into a proceeding" refers to the introduction or incorporation of testimony or documentary matter into any part of the official record of a proceeding subject to this part.

(d) "National Security Information" means information that has been classified pursuant to Executive Order 12356.

(e) "Party," in the case of proceedings subject to this subpart includes a person admitted as a party pursuant to § 2.714 or an interested State admitted pursuant to § 2.715(c).

[41 FR 53329, Dec. 6, 1976, as amended at 47 FR 56314, Dec. 16, 1982]

§ 2.903 Protection of restricted data and national security information.

Nothing in this subpart shall relieve any person from safeguarding Restricted Data or National Security Information in accordance with the applicable provisions of laws of the United States and rules, regulations or orders of any Government Agency.

§ 2.904 Classification assistance.

On request of any party to a proceeding or of the presiding officer, the Commission will designate a representative to advise and assist the presiding officer and the parties with respect to security classification of information and the safeguards to be observed.

§ 2.905 Access to restricted data and national security information for parties; security clearances.

(a) Access to restricted data and national security information introduced into proceedings. Except as provided in paragraph (h) of this section, restricted data or national security information introduced into a proceeding subject to this part will be made available to any interested party having the required security clearance; to counsel for an interested party provided the counsel has the required security clearance; and to such additional persons having the required security clearance as the Commission or the presiding officer determined are needed by such party for adequate preparation or presentation of his case. Where the interest of such party will not be prejudiced, the Commission or presiding officer may postpone action upon an application for access under this paragraph until after a notice of hearing, answers, and replies have been filed.

(b) Access to Restricted Data or National Security Information not introduced into proceedings.

(1) On application showing that access to Restricted Data or National Security Information may be required for the preparation of a party's case, and except as provided in paragraph (h) of this section, the Commission or the presiding officer will issue an order granting access to such Restricted Data or National Security Information to the party upon his obtaining the required security clearance, to counsel for the party upon their obtaining the required security clearance, and to such other individuals as may be needed by the party for the preparation and presentation of his case upon their obtaining the required clearance.

(2) Where the interest of the party applying for access will not be prejudiced, the Commission or the presiding officer may postpone action on an application pursuant to this paragraph until after a notice of hearing, answers and replies have been filed.

(c) The Commission will consider requests for appropriate security clearances in reasonable numbers pursuant to this section. A reasonable charge will be made by the Commission for costs of security clearance pursuant to this section.

(d) The presiding officer may certify to the Commission for its consideration and determination any questions relating to access to Restricted Data or National Security Information arising under this section. Any party affected by a determination or order of the presiding officer under this section may appeal forthwith to the Commission from the determination or order. The filing by the staff of an appeal from an order of a presiding officer granting access to Restricted Data or National Security Information shall stay the order pending determination of the appeal by the Commission.

(e) Application granting access to restricted data or national security information.

(1) An application under this section for orders granting access to restricted data or national security information not received from another Government agency will normally be acted upon by the presiding officer, or if a proceeding is not before a presiding officer, by the Commission.

(2) An application under this section for orders granting access to restricted data or national security information where the information has been received by the Commission from another Government agency will be acted upon by the Commission.

(f) To the extent practicable, an application for an order granting access under this section shall describe the subjects of Restricted Data or National Security Information to which access is desired and the level of classification (confidential, secret or other) of the information; the reasons why access to the information is requested; the names of individuals for whom clearances are requested; and the reasons why security clearances are being requested for those individuals.

(g) On the conclusion of a proceeding, the Commission will terminate all orders issued in the proceeding for access to Restricted Data or National Security Information and all security clearances granted pursuant to them; and may issue such orders requiring the disposal of classified matter received pursuant to them or requiring the observance of other procedures to safeguard such classified matter as it deems necessary to protect Restricted Data or National Security Information.

(h) Refusal to grant access to restricted data or national security information.

(1) The Commission will not grant access to restricted data or national security information unless it determines that the granting of access will not be inimical to the common defense and security.

(2) Access to Restricted Data or National Security Information which has been received by the Commission from another Government agency will not be granted by the Commission if the originating agency determines in writing that access should not be granted. The Commission will consult the originating agency prior to granting access to such data or information received from another Government agency.

§ 2.906 Obligation of parties to avoid introduction of restricted data or national security information.

It is the obligation of all parties in a proceeding subject to this part to avoid, where practicable, the introduction of Restricted Data or National Security Information into the proceeding. This obligation rests on each party whether or not all other parties have the required security clearance.

§ 2.907 Notice of intent to introduce restricted data or national security information.

(a) If, at the time of publication of a notice of hearing, it appears to the staff that it will be impracticable for it to avoid the introduction of Restricted Data or National Security Information into the proceeding, it will file a notice of intent to introduce Restricted Data or National Security Information.

(b) If, at the time of filing of an answer to the notice of hearing it appears to the party filing that it will be impracticable for the party to avoid the introduction of Restricted Data or National Security Information into the proceeding, the party shall state in the answer a notice of intent to introduce Restricted Data or National Security Information into the proceeding.

(c) If, at any later stage of a proceeding, it appears to any party that it will be impracticable to avoid the introduction of Restricted Data or National Security Information into the proceeding, the party shall give to the other parties prompt written notice of intent to introduce Restricted Data or National Security Information into the proceeding.

(d) Restricted Data or National Security Information shall not be introduced into a proceeding after publication of a notice of hearing unless a notice of intent has been filed in accordance with § 2.908, except as permitted in the discretion of the presiding officer when it is clear that no party or the public interest will be prejudiced.

§ 2.908 Contents of notice of intent to introduce restricted data or other national security information.

(a) A party who intends to introduce Restricted Data or other National Security Information shall file a notice of intent with the Secretary. The notice shall be unclassified and, to the extent consistent with classification requirements, shall include the following:

(1) The subject matter of the Restricted Data or other National Security Information which it is anticipated will be involved;

(2) The highest level of classification of the information (confidential, secret, or other);

(3) The stage of the proceeding at which he anticipates a need to introduce the information; and

(4) The relevance and materiality of the information to the issues on the proceeding.

(b) In the discretion of the presiding officer, such notice, when required by § 2.907(c), may be given orally on the record.

§ 2.909 Rearrangement or suspension of proceedings.

In any proceeding subject to this part where a party gives a notice of intent to introduce Restricted Data or other National Security Information, and the presiding officer determines that any other interested party does not have required security clearances, the presiding officer may in his discretion:

(a) Rearrange the normal order of the proceeding in a manner which gives such interested parties an opportunity to obtain required security clearances with minimum delay in the conduct of the proceeding.

(b) Suspend the proceeding or any portion of it until all interested parties have had opportunity to obtain required security clearances. No proceeding shall be suspended for such reasons for more than 100 days except with the consent of all parties or on a determination by the presiding officer that further suspension of the proceeding would not be contrary to the public interest.

(c) Take such other action as he determines to be in the best interest of all parties and the public.

§ 2.910 Unclassified statements required.

(a) Whenever Restricted Data or other National Security Information is introduced into a proceeding, the party offering it shall submit to the presiding officer and to all parties to the proceeding an unclassified statement setting forth the information in the classified matter as accurately and completely as possible.

(b) In accordance with such procedures as may be agreed upon by the parties or prescribed by the presiding officer, and after notice to all parties and opportunity to be heard thereon, the presiding officer shall determine whether the unclassified statement or any portion of it, together with any appropriate modifications suggested by any party, may be substituted for the classified matter or any portion of it without prejudice to the interest of any party or to the public interest.

(c) If the presiding officer determines that the unclassified statement, together with such unclassified modifications as he finds are necessary or appropriate to protect the interest of other parties and the public interest, adequately sets forth information in the classified matter which is relevant and material to the issues in the proceeding, he shall direct that the classified matter be excluded from the record of the proceeding. His determination will be considered by the Commission as a part of the decision in the event of review.

(d) If the presiding officer determines that an unclassified statement does not adequately present the information contained in the classified matter which is relevant and material to the issues in the proceeding, he shall include his reasons in his determination. This determination shall be included as part of the record and will be considered by the Commission in the event of review of the determination.

(e) The presiding officer may postpone all or part of the procedures established in this section until the reception of all other evidence has been completed. Service of the unclassified statement required in paragraph (a) of this section shall not be postponed if any party does not have access to Restricted Data or other National Security Information.

§ 2.911 Admissibility of restricted data or other national security information.

A presiding officer shall not receive any Restricted Data or other National Security Information in evidence unless:

(a) The relevance and materiality of the Restricted Data or other National Security Information to the issues in the preceeding, and its competence, are clearly established; and

(b) The exclusion of the Restricted Data or other National Security Information would prejudice the interests of a party or the public interest.

§ 2.912 Weight to be attached to classified evidence.

In considering the weight and effect of any Restricted Data or other National Security Information received in evidence to which an interested party has not had opportunity to receive access, the presiding officer and the Commission shall give to such evidence such weight as is appropriate under the circumstances, taking into consideration any lack of opportunity to rebut or impeach the evidence.

§ 2.913 Review of Restricted Data or other National Security Information received in evidence.

At the close of the reception of evidence, the presiding officer shall review the record and shall direct that any Restricted Data or other National Security Information be expunged from the record where such expunction would not prejudice the interests of a party or the public interest. Such directions by the presiding officer will be considered by the Commission in the event of review of the determinations of the presiding officer.

Subpart J—Procedures Applicable to Proceedings for the Issuance of Licenses for the Receipt of High-Level Radioactive Waste at a Geologic Repository

SOURCE: 54 FR 14944, Apr. 14, 1989, unless otherwise noted.

§ 2.1000 Scope of subpart.

The rules in this subpart govern the procedure for applications for a license to receive and possess high-level radioactive waste at a geologic repository operations area noticed pursuant to § 2.101(f)(8) or § 2.105(a)(5) of this part. The procedures in this subpart take precedence over the 10 CFR Subpart G, rules of general applicability, except for the following provisions: §§ 2.702, 2.703, 2.704, 2.707, 2.709, 2.711, 2.713, 2.715, 2.715a, 2.717, 2.718, 2.720, 2.721, 2.722, 2.732, 2.733, 2.734, 2.742, 2.743, 2.749, 2.750, 2.751, 2.753, 2.754, 2.755, 2.756, 2.757, 2.758, 2.759, 2.760, 2.761, 2.762, 2.763, 2.770, 2.771, 2.772, 2.780, 2.781, 2.785, 2.786, 2.787, 2.788, and 2.790.

§ 2.1001 Definitions.

"ASCII File" means a computerized text file conforming to the American Standard Code for Information Interchange which represent characters and symbols.

"Bibliographic header" means the minimum series of descriptive fields that a potential party, interested governmental participant, or party must submit with a document or other material. The bibliographic header fields are a subset of the fields in the full header.

"Circulated draft" means a nonfinal document circulated for supervisory concurrence or signature in which the original author or others in the concurrence process have non-concurred. A "circulated draft" meeting the above criterion includes a draft of a document that eventually becomes a final ocument, and a draft of a document hat does not become a final document ue to either a decision not to finalize he document or the passage of a sub- tantial period of time in which no ction has been taken on the docu- ient.

“Document” means any written, rinted, recorded, magnetic, graphic iatter, or other documentary materi- l, regardless of form or characteristic.

“Documentary material” means any iaterial or other information that is elevant to, or likely to lead to the dis- overy of information that is relevant o, the licensing of the likely candi- ate site for a geologic repository. The cope of documentary material shall e guided by the topical guidelines in he applicable NRC Regulatory Guide.

“DOE” means the U.S. Department f Energy or its duly authorized repre- entatives.

“Full header” means the series of escriptive fields and subject terms iven to a document or other material.

“Image” means a visual likeness of a ocument, presented on a paper copy, icroform, or a bit-map on optical or iagnetic media.

“Interested governmental partici- ant” means any person admitted nder § 2.715(c) of this part to the pro- eeding on an application for a license o receive and possess high-level radio- ctive waste at a geologic repository perations area pursuant to Part 60 of his chapter.

“LSS Administrator” means the erson within the U.S. Nuclear Regu- atory Commission responsible for ad- iinistration, management, and oper- tion of the Licensing Support ystem. The LSS Administrator shall ot be in any organizational unit that ither represents the U.S. Nuclear egulatory Commission staff as a arty to the high-level waste licensing roceeding or is a part of the manage- ient chain reporting to the Director f the Office of Nuclear Material afety and Safeguards. For purposes f this subpart the organizational unit ithin the NRC selected to be the LSS dministrator shall not be considered o be a party to the proceeding.

“Marginalia” means handwritten, rinted, or other types of notations added to a document excluding underlining and highlighting.

“NRC” means the U.S. Nuclear Regulatory Commission or its duly authorized representatives.

“Party” for purposes of this subpart means the DOE, the NRC staff, the host State and any affected Indian Tribe in accordance with § 60.63(a) of this chapter, and a person admitted under § 2.1014 of this subpart to the proceeding on an application for a license to receive and possess high-level radioactive waste at a geologic repository operations area pursuant to Part 60 of this chapter; provided that a host State or affected Indian Tribe shall file a list of contentions in accordance with the provisions of § 2.1014(a)(2) (ii), (iii), and (iv) of this subpart.

“Personal record” means a document in the possession of an individual associated with a party, interested governmental participant, or potential party that was not required to be created or retained by the party, interested governmental participant, or potential party, and can be retained or discarded at the possessor's sole discretion, or documents of a personal nature that are not associated with any business of the party, interested governmental participant, or potential party.

“Potential party” means any person who, during the period before the issuance of the first pre-hearing conference order under § 2.1021(d) of this subpart, is granted access to the Licensing Support System and who consents to comply with the regulations set forth in Subpart J of this part, including the authority of the Pre-License Application Licensing Board established pursuant to § 2.1010 of this subpart.

“Pre-license application phase” means the time period before the license application to receive and possess high-level radioactive waste at a geologic repository operations area is docketed under section 2.101(f)(3) of this part.

“Preliminary draft” means any nonfinal document that is not a circulated draft.

“Searchable full text” means the electronic indexed entry of a document in ASCII into the Licensing Support System that allows the identification of specific words or groups of words within a text file.

§ 2.1002 High-level waste Licensing Support System.

(a) The Licensing Support System is an electronic information management system containing the documentary material of the DOE and its contractors, and the documentary material of all other parties, interested governmental participants and potential parties and their contractors. Access to the Licensing Support System by the parties, interested governmental participants, and potential parties provides the document discovery in the proceeding. The Licensing Support System provides for the electronic transmission of filings by the parties during the high-level waste proceeding, and orders and decisions of the Commission and Commission adjudicatory boards related to the proceeding.

(b) The Licensing Support System shall include documentary material not privileged under § 2.1006 or excluded under § 2.1005 of this subpart.

(c) The participation of the host State in the Licensing Support System during the pre-license application phase shall not have any affect on the State's exercise of its disapproval rights under section 116(b)(2) of the Nuclear Waste Policy Act, as amended, 42 U.S.C. 10136(b)(2).

(d) This subpart shall not affect any independent right of a potential party, interested governmental participant or party to receive information.

§ 2.1003 Submission of material to the LSS.

(a) Subject to the exclusions in § 2.1005 of this subpart and paragraphs (c) and (d) of this section, each potential party, interested governmental participant or party, with the exception of the DOE and the NRC, shall submit to the LSS Administrator—

(1) Subject to paragraph (a)(3) of this section, an ASCII file, an image, and a bibliographic header, reasonably contemporaneous with its creation or acquisition, for all documentary material (including circulated drafts but excluding preliminary drafts) generated by, or at the direction of, or acquired by, a potential party, interested governmental participant, or party after the date on which such potential party, interested governmental participant or party is given access to the Licensing Support System.

(2) An image, a bibliographic header, and, if available, an ASCII file, no later than six months before the license application is submitted under § 60.22 of this chapter, for all documentary material (including circulated drafts but excluding preliminary drafts), generated by, or at the direction of, or acquired by, a potential party, interested governmental participant, or party, on or before the date on which such potential party, interested governmental participant, or party was given access to the Licensing Support System.

(3) An image and bibliographic header for documentary material included under paragraphs (a)(1) of this section that were acquired from a person that is not a potential party, party, or interested governmental participant.

(b) Subject to the exclusions in § 2.1005 of this subpart, and subject to paragraphs (c) and (d) of this section, the DOE and the NRC shall submit to the LSS Administrator—

(1) An ASCII file, an image, and a bibliographic header, reasonably contemporaneous with its creation or acquisition, for all documentary material (including circulated drafts but excluding preliminary drafts) generated by, or at the direction of, or acquired by, the DOE or the NRC after the date on which the Licensing Support System is available for access.

(2) An ASCII file, an image, and a bibliographic header no later than six months before the license application is submitted under § 60.22 of this chapter for all documentary material (including circulated drafts but excluding preliminary drafts) generated by, or at the direction of, or acquired by, the DOE or the NRC on or before the date on which the Licensing Support System is available for access.

(c)(1) Each potential party, interested governmental participant, or party shall submit, subject to the claims of privilege in § 2.1006, an image and a bibliographic header, in a time frame to be established by the access protocols under § 2.1011(d)(10) of this subpart, for all graphic oriented documentary material. Graphic-oriented documentary material includes, raw data, computer runs, computer programs and codes, field notes, laboratory notes, maps, diagrams and photographs which have been printed, scripted, hand written or otherwise displayed in any hard copy form and which, while capable of being captured in electronic image by a digital scanning device, may be captured and submitted to the LSS Administrator in any form of image. Text embedded within these documents need not be separately entered in searchable full text. Such graphic-oriented documents may include: Calibration procedures, logs, guidelines, data and discrepancies; Gauge, meter and computer settings; Probe locations; Logging intervals and rates; Data logs in whatever form captured; Text data sheets; Equations and sampling rates; Sensor data and procedures; Data Descriptions; Field and laboratory notebooks; Analog computer, meter or other device print-outs; Digital computer print-outs; Photographs; Graphs, plots, strip charts, sketches; Descriptive material related to the information above.

(2) Each potential party, interested governmental participant, or party, in a time frame to be established by the access protocols under § 2.1011(d)(10) of this subpart, shall submit, subject to the claims of privilege in § 2.1006, only a bibliographic header for each item of documentary material that is not suitable for entry into the Licensing Support System in image or searchable full text. The header shall include all required fields and shall sufficiently describe the information and references to related information and access protocols. Whenever any documentary material is transferred to some other media, a new header shall be supplied. Any documentary material for which a header only has been supplied to the system shall be made available to any other party, potential party or interested governmental participant through the access protocols determined by the LSS Administrator under § 2.1011(d)(10) or through entry upon land for inspection and other purposes pursuant to § 2.1020.

(3) Whenever documentary material described in paragraphs (c)(1) or (c)(2) of this section has been collected or used in conjunction with other such information to analyze, critique, support or justify any particular technical or scientific conclusion, or relates to other documentary material as part of the same scope of technical work or investigation, then an appropriate bibliographic header shall be submitted for a table of contents describing that package of information, and documentary material contained within that package shall be named and identified.

(d) Each potential party, interested governmental participant, or party shall submit a bibliographic header for each documentary material—

(1) For which a claim of privilege is asserted; or

(2) Which constitutes confidential financial or commercial information; or

(3) Which constitutes safeguards information under § 73.21 of this Chapter.

(e) In addition to the submission of documentary material under paragraphs (a) and (b) of this section, potential parties, interested governmental participants, or parties may request that another potential party's, interested governmental participant's, party's, or third party's documentary material be entered into the Licensing Support System in searchable full text if they or the other potential party, interested governmental participant, or party intend to rely on such documentary material during the licensing proceeding.

(f) Submission of ASCII files, images, and bibliographic headers shall be in accordance with established criteria.

(g) Basic licensing documents generated by DOE, such as the Site Characterization Plan, the Environmental Impact Statement, and the license application, or by NRC such as the Site Characterization Analysis, and the Safety Evaluation Report, shall be submitted to the LSS Administrator by the respective agency that generated the document.

(h)(1) Docketing of the application for a license to receive and possess high-level radioactive waste at a geologic repository operations area shall not be permitted under Subpart J of this part unless the LSS Administrator has certified, at least six months in advance of the submission of the license application, that the DOE has substantially complied with its obligations under this section.

(2)(i) The LSS Administrator shall evaluate the extent of the DOE's compliance with the provisions of this section at six month intervals beginning six months after his or her appointment under § 2.1011 of this subpart.

(ii) The LSS Administrator shall issue a written report of his or her evaluation of DOE compliance under paragraph (h)(1) of this section. The report shall include recommendations to the DOE on any actions necessary to achieve substantial compliance pursuant to paragraph (h)(1) of this section.

(iii) Potential parties may submit comments on the report prepared pursuant to paragraph (h)(2)(ii) of this section to the LSS Administrator.

(3)(i) In the event that the LSS Administrator does not certify substantial compliance under paragraph (h)(1) of this section, the proceeding on the application for a license to receive and possess high-level radioactive waste at a geologic repository operations area shall be governed by Subpart G of this part.

(ii) If, subsequent to the submission of such application under Subpart G of this part, the LSS Administrator issues the certification described in paragraph (h)(1) of this section, the Commission may, upon request by any party or interested governmental participant to the proceeding, specify the extent to which the provisions of Subpart J of this part may be used in the proceeding.

§ 2.1004 Amendments and additions.

(a) Within sixty days after a document has been entered into the Licensing Support System by the LSS Administrator during the pre-license application phase, and within five days
after a document has been entere
into the Licensing Support System b
the LSS Administrator after the li
cense application has been docketed
the submitter shall make reasonabl
efforts to verify that the documen
has been entered correctly, and sha
notify the LSS Administrator of an
errors in entry.

(b) After the time period specifie
for verification in paragraph (a) c
this section has expired, a submitte
who desires to amend an incorrect do
ument shall—

(1) Submit the corrected version t
the LSS Administrator for entry as
separate document; and

(2) Submit a bibliographic head
for the corrected version that ident
fies all revisions to the corrected ve
sion.

(3) The LSS Administrator sha
ensure that the bibliographic head
for the original document specifi
that a corrected version is also in th
Licensing Support System.

(c)(1) A submitter shall submit an
revised pages of a document in the L
censing Support System to the LS
Administrator for entry into the
censing Support System as a separa
document.

(2) The LSS Administrator sh
ensure that the bibliographic head
for the original document specifi
that revisions have been entered in
the Licensing Support System.

(d) Any document that has been i
correctly excluded from the Licensi
Support System must be submitted
the LSS Administrator by the pote
tial party, interested government
participant, or party responsible f
the submission of the docume
within two days after its exclusion h
been identified unless some other ti
is approved by the Pre-License App
cation Licensing Board or the Lice
ing Board established for the hig
level waste proceeding, hereinafter t
"Hearing Licensing Board"; provide
however, that the time for submitt
under this paragraph will be stay
pending Board action on a motion
extend the time of submittal.

§ 2.1005 Exclusions.

The following material is excluded from entry into the Licensing Support System, either through initial entry pursuant to § 2.1003 of this subpart, or through derivative discovery pursuant to § 2.1019(i) of this subpart—

(a) Official notice materials;

(b) Reference books and text books;

(c) Material pertaining exclusively to administration, such as material related to budgets, financial management, personnel, office space, general distribution memoranda, or procurement, except for the scope of work on a procurement related to repository siting, construction, or operation, or to the transportation of spent nuclear fuel or high-level waste;

(d) Press clippings and press releases;

(e) Junk mail;

(f) Preferences cited in contractor reports that are readily available;

(g) Classified material subject to Subpart I of this Part.

§ 2.1006 Privilege.

(a) Subject to the requirements in § 2.1003(d) of this subpart, the traditional discovery privileges recognized in NRC adjudicatory proceedings and the exceptions from disclosure in § 2.790 of this part may be asserted by potential parties, interested governmental participants, and parties. In addition to Federal agencies, the deliberative process privilege may also be asserted by State and local government entities and Indian Tribes.

(b) Any document for which a claim of privilege is asserted but is denied in whole or in part by the Pre-license Application Licensing Board or the Hearing Licensing Board shall be submitted by the party, interested governmental participant, or potential party that asserted the claim to—

(1) The LSS Administrator for entry into the Licensing Support System into an open access file; or

(2) To the LSS Administrator or to the Board, for entry into a Protective Order file, if the Board so directs under § 2.1010(b) or § 2.1018(c) of this subpart.

(c) Notwithstanding any availability of the deliberative process privilege under paragraph (a) of this section, circulated drafts not otherwise privileged shall be submitted for entry into the Licensing Support System pursuant to §§ 2.1003(a) and 2.1003(b) of this subpart.

§ 2.1007 Access.

(a)(1) Terminals for access to full headers for all documents in the Licensing Support System during the pre-license application phase, and images of the non-privileged documents of DOE, shall be provided at the headquarters of DOE, and at all DOE Local Public Document Rooms established in the vicinity of the likely candidate site for a geologic repository.

(2) Terminals for access to full headers for all documents in the Licensing Support System during the pre-license application phase, and images of the non-privielged documents of NRC, shall be provided at the headquarters Public Document Room of NRC, and at all NRC Local Public Document Rooms established in the vicinity of the likely candidate site for a geologic repository, and at the NRC Regional Offices, including the Uranium Recovery Field Office in Denver, Colorado.

(3) The access terminals specified in paragraphs (a)(1) and (a)(2) of this section shall include terminals at Las Vegas, Nevada; Reno, Nevada; Carson City, Nevada; Nye County, Nevada; and Lincoln County, Nevada.

(4) The headers specified in paragraphs (a)(1) and (a)(2) of this section shall be available at the same time that those headers are made available to the potential parties, parties, and interested governmental participants.

(5) Public access to the searchable full text and images of all the documents in the Licensing Support System, not privileged under section 2.1006, shall be provided by the LSS Administrator at all the locations specified in paragraphs (a)(1) and (a)(2) of this section after a notice of hearing has been issued pursuant to § 2.101(f)(8) or § 2.105(a)(5) on an application for a license to receive and possess high-level radioactive waste at a geologic repository operations area.

(b) Public availability of paper copies of the records specified in paragraph (a) of this section, as well as duplication fees, and fee waiver for those records, will be governed by the Freedom of Information Act regulations of the respective agencies.

(c) Access to the Licensing Support System for potential parties, interested governmental participants, and parties will be provided in the following manner—

(1) Full text search capability through dial-up access from remote locations at the requestor's expense;

(2) Image access at remote locations at the requestor's expense;

(3) The capability to electronically request a paper copy of a document at the time of search;

(4) Generic fee waiver for the paper copy requested under paragraph (c)(3) of this section for requestors who meet the criteria in § 9.41 of this chapter.

(d) Documents submitted to the LSS Administrator for entry into the Licensing Support System shall not be considered as agency records of the LSS Administrator for purposes of the Freedom of Information Act (FOIA), 5 U.S.C. 552, and shall remain under the custody and control of the agency or organization that submitted the documents to the LSS Administrator. Requests for access pursuant to the FOIA to documents submitted by a Federal agency shall be transmitted to that Federal agency.

§ 2.1008 Potential parties.

(a) A person may petition the Pre-License Application Licensing Board established pursuant to § 2.1010 of this subpart for access to the Licensing Support System.

(b) A petition must set forth with particularity the interest of the petitioner in gaining access to the Licensing Support System with particular reference to—

(1) The factors set out in § 2.1014(c) (1), (2), and (3) of this subpart as determined in reference to the topical guidelines in the applicable NRC Regulatory Guide; or

(2) The criteria in § 2.715(c) of this part as determined in reference to the topical guidelines in the applicable NRC Regulatory Guide.

(c) The Pre-License Application Licensing Board shall, in ruling on a petition for access, consider the factors set forth in paragraph (b) of this section.

(d) Any person whose petition for access is approved pursuant to paragraph (c) of this section shall comply with the regulations set forth in this subpart, including § 2.1003, and agree to comply with the orders of the Pre-License Application Licensing Board established pursuant to § 2.1010 of this subpart.

§ 2.1009 Procedures.

(a) Each potential party, interested governmental participant, or party shall—

(1) Designate an official who will be responsible for administration of its Licensing Support System responsibilities;

(2) Establish procedures to implement the requirements in § 2.1003 of this subpart;

(3) Provide training to its staff on the procedures for implementation of Licensing Support System responsibilities;

(4) Ensure that all documents carry the submitter's unique identification number;

(5) Cooperate with the advisory review process established by the LSS Administrator pursuant to § 2.1011(e) of this subpart.

(b) The responsible official designated pursuant to paragraph (a)(1) of this section shall certify to the LSS Administrator, at six month intervals designated by the LSS Administrator, that the procedures specified in paragraph (a)(2) of this section have been implemented, and that to the best of his or her knowledge, the documentary material specified in § 2.1003 of this subpart has been identified and submitted to the Licensing Support System.

§ 2.1010 Pre-License Application Licensing Board.

(a)(1) A Pre-License Application Licensing Board designated by the Commission shall rule on all petitions for access to the Licensing Support System submitted under § 2.1008 of this subpart; disputes over the entry of documents during the pre-license application phase, including disputes relating to relevance and privilege; disputes relating to the LSS Administrator's decision on substantial compliance pursuant to § 2.1003(h) of this subpart; discovery disputes; disputes relating to access to the Licensing Support System; disputes relating to the design and development of the Licensing Support System by DOE or the operation of the Licensing Support System by the LSS Administrator under § 2.1011 of this subpart, including disputes relating to the implementation of the recommendations of the LSS Advisory Review Panel established under § 2.1011(e) of this subpart.

(2) The Pre-License Application Licensing Board shall be designated six months before access to the Licensing Support System is scheduled to be available.

(b) The Board shall rule on any claim of document withholding to determine—

(1) Whether it is documentary material within the scope of this subpart;

(2) Whether the material is excluded from entry into the Licensing Support System under § 2.1005 of this subpart;

(3) Whether the material is privileged or otherwise excepted from disclosure under section 2.1006 of this subpart;

(4) If privileged, whether it is an absolute or qualified privilege;

(5) If qualified, whether the document should be disclosed because it is necessary to a proper decision in the proceeding;

(6) Whether the material should be disclosed under a protective order containing such protective terms and conditions (including affidavits of non-disclosure) as may be necessary and appropriate to limit the disclosure to potential participants, interested governmental participants and parties in the proceeding, or to their qualified witnesses and counsel. When Safeguards Information protected from disclosure under section 147 of the Atomic Energy Act, as amended, is received and possessed by a potential party, interested governmental participant, or party, other than the Commission staff, it shall also be protected according to the requirements of § 73.21 of this chapter. The Board may also prescribe such additional procedures as will effectively safeguard and prevent disclosure of Safeguards Information to unauthorized persons with minimum impairment of the procedural rights which would be available if Safeguards Information were not involved. In addition to any other sanction that may be imposed by the Board for violation of an order issued pursuant to this paragraph, violation of an order pertaining to the disclosure of Safeguards Information protected from disclosure under section 147 of the Atomic Energy Act, as amended, may be subject to a civil penalty imposed pursuant to § 2.205 of this part. For the purpose of imposing the criminal penalties contained in section 223 of the Atomic Energy Act, as amended, any order issued pursuant to this paragraph with respect to Safeguards Information shall be deemed an order issued under section 161b of the Atomic Energy Act.

(c) Upon a final determination that the material is relevant, and not privileged, exempt from disclosure, or otherwise exempt from entry into the Licensing Support System under § 2.1005 of this subpart, the potential party, interested governmental participant, or party who asserted the claim of withholding must submit the document to the LSS Administrator within two days for entry into the Licensing Support System.

(d) The service of all pleadings, discovery requests and answers, orders, and decisions during the pre-license application phase shall be made according to the procedures specified in § 2.1013(c) of this subpart.

(e) the Pre-License Application Licensing Board shall possess all the general powers specified in §§ 2.721(d) and 2.718 of this part.

§ 2.1011 LSS management and administration.

(a) The Licensing Support System shall be administered by the LSS Administrator who will be designated within sixty days after the effective date of the rule.

(b)(1) Consistent with the requirements in this subpart, and in consultation with the LSS Administrator, DOE shall be responsible for the design and development of the computer system necessary to implement the Licensing Support System, including the procurement of computer hardware and software, and, with the concurrence of the LSS Administrator, the follow-on redesign and procurement of equipment necessary to maintain the Licensing Support System.

(2) With respect to the procurement undertaken pursuant to paragraph (b)(1) of this section, a representative of the LSS Administrator shall participate as a member of the Source Evaluation Panel for such procurement.

(3) DOE shall implement consensus advice from the LSS Advisory Review Panel under paragraph (f)(1) of this section that is consistent with the requirements of this subpart.

(c)(1) The Licensing Support System, described in § 2.1002, shall not be part of any computer system that is controlled by any party, interested governmental participant, or potential party, including DOE and its contractors, or that is physically located on the premises of any party, interested governmental participant, or potential party, including DOE and that of its contractors.

(2) Nothing in this subpart shall preclude DOE, NRC, or any other party, potential party, or interested governmental participant, from using the Licensing Support System computer facility for a records management system for documentary material independent of the Licensing Support System.

(d) The LSS Administrator shall be responsible for the management and administration of the Licensing Support System, including the responsibility to—

(1) Implement the consensus advice of the LSS Advisory Review Panel under paragraph (f) of this section that is consistent with the requirements of this subpart;

(2) Provide the necessary personnel, materials, and services for operation and maintenance of the Licensing Support System;

(3) Identify and recommend to DOE any redesign or procurement actions necessary to ensure that the design and operation of the Licensing Support System meets the objectives of this subpart;

(4) Make a concurrence decision, within thirty days of a request from DOE, on any redesign and related procurement performed by DOE under paragraph (b) of this section;

(5) Consult with DOE on the design and development of the Licensing Support System under paragraph (b) of this section;

(6) Evaluate and certify compliance with the requirements of this subpart under § 2.1003(h);

(7) Ensure LSS availability and the integrity of the LSS data base;

(8) Receive and enter the documentary material specified in § 2.1003 of this subpart into the Licensing Support System in the appropriate format;

(9) Maintain security for the Licensing Support System data base, including assigning user password security codes;

(10) Establish access protocols for raw data, field notes, and other items covered by § 2.1003(c) of this subpart;

(11) Maintain the thesaurus and authority tables for the Licensing Support System;

(12) Establish and implement a training program for Licensing Support System users;

(13) Provide support staff to assist users of the Licensing Support System;

(14) Other duties as specified in this subpart or necessary for Licensing Support System operation and maintenance.

(e)(1) The LSS Administrator shall establish an LSS Advisory Review Panel composed of the LSS Advisory Committee members identified in paragraph (e)(2) of this section who wish to serve within sixty days after designation of the LSS Administrator pursuant to paragraph (a) of this section. The LSS Administrator shall have the authority to appoint additional representatives to the Advisory Review Panel consistent with the requirements of the Federal Advisory Committee Act, 5 U.S.C. App. I, giving particular consideration to potential parties, parties, and interested governmental participants who were not members of the NRC HLW Licensing Support System Advisory Committee.

(2) Pending the establishment of the LSS Advisory Review Panel under paragraph (e)(1) of this section, the NRC will establish a Licensing Support System Advisory Committee whose membership will initially include the State of Nevada, a coalition of affected units of local government in Nevada who were on the NRC High-Level Waste Licensing Support System Advisory Committee, DOE, NRC, the National Congress of American Indians, the coalition of national environmenal groups who were on the NRC High-Level Waste Licensing Support System Advisory Committee and such other members as the Commission may from time to time designate to perform the responsibilities in paragraph (f) of this section.

(f)(1) The LSS Advisory Review Panel shall provide advice to—(i) DOE on the fundamental issues of the design and development of the computer system necessary to implement the Licensing Support System under paragraph (b) of this section; and

(ii) The LSS Administrator on the operation and maintenance of the Licensing Support System under paragraph (d) of this section.

(2) The responsibilities of the LSS Advisory Review Panel shall include advice on—(i) Format standards for the submission of documentary material to the Licensing Support System by the parties, interested governmental participants, or potential parties, such as ASCII files, bibliographic headers, and images;

(ii) The procedures and standards for the electronic transmission of filings, orders, and decisions during both the pre-license application phase and the high-level waste licensing proceeding;

(iii) Access protocols for raw data, field notes, and other items covered by § 2.1003(c) of this subpart;

(iv) A thesaurus and authority tables;

(v) Reasonable requirements for headers, the control of duplication, retrieval, display, image delivery, query response, and "user friendly" design;

(vi) Other duties as specified in this subpart or as directed by the LSS Administrator.

[54 FR 14944, Apr. 14, 1989, as amended at 55 FR 51401, Dec. 14, 1990]

§ 2.1012 Compliance.

(a) In addition to the requirements of § 2.101(f) of this part, the Director of the NRC Office of Nuclear Materials Safety and Safeguards may determine that the tendered application is not acceptable for docketing under this subpart, if the LSS Administrator has not issued the certification described in § 2.1003(h)(1) of this part.

(b)(1) A person, including a potential party granted access to the Licensing Support System under § 2.1008 of this subpart, shall not be granted party status under § 2.1014 of this part, or status as an interested governmental participant under § 2.715(c) of this part, if it cannot demonstrate substantial and timely compliance with ther requirements of § 2.1003 of this subpart at the time it requests participation in the high-level waste licensing proceeding under either § 2.1014 or § 2.715(c) of this part.

(2) A person denied party status or interested governmental participant status under paragraph (b)(1) of this section may request party status or interested governmental participant status upon a showing of subsequent compliance with the requirements of § 2.1003 of this subpart. Admission of such a party or interested governmental participant under § 2.1014 of this subpart or § 2.715(c) of this part, respectively, shall be conditioned on accepting the status of the proceeding at the time of admission.

(c) The Hearing Licensing Board shall not make a finding of substantial and timely compliance pursuant to paragraph (b) of this subpart for any person who is not in compliance with all applicable orders of the Pre-License Application Licensing Board established pursuant to § 2.1010 of this subpart.

(d) Access to the Licensing Support System may be suspended or terminated by the Pre-license Application Licensing Board or the Hearing Licensing Board for any potential party, interested governmental participant or party who is in noncompliance with any applicable order of the Pre-license Application Licensing Board or the Hearing Licensing Board or the requirements of this subpart.

§ 2.1013 Use of LSS during the adjudicatory proceeding.

(a)(1) Pursuant to § 2.702, the Secretary of the NRC will maintain the official docket of the proceeding on the application for a license to receive and possess waste at a geologic repository operations area.

(2) Commencing with the docketing of the license application to receive and possess high-level radioactive waste at a geologic repository operations area pursuant to Part 60 of this chapter, the LSS Administrator shall establish a file within the Licensing Support System to contain the official record materials of the high-level radioactive waste licensing proceeding in searchable full text, or for material that is not suitable for entry in searchable full text, by header and image, as appropriate.

(b) Absent good cause, all exhibits tendered during the hearing must have been entered into the Licensing Support System before the commencement of that portion of the hearing in which the exhibit will be offered. The official record file in the Licensing Support System will contain a list of all exhibits, showing where in the transcript each was marked for identification and where it was received into evidence or rejected. Transcripts will be entered into the Licensing Support System by the LSS Administrator on a daily basis in order to provide next-day availability at the hearing.

(c)(1) All filings in the adjudicatory proceeding on the license application to receive and possess high-level radioactive waste at a geologic respository operations area pursuant to Part 60 of this chapter shall be transmitted electronically by the submitter to the board(s), parties, the LSS Administrator, and the Secretary, according to established format requirements. Parties and interested governmental participants will be required to use a password security code for the electronic transmission of these documents.

(2) Filings required to be served shall be served upon either the parties and interested governmental participants, or their designated representatives. When a party or interested governmental participant has appeared by attorney, service must be made upon the attorney of record.

(3) Service upon a party or interested governmental participant is completed when the sender receives electronic acknowledgment ("delivery receipt") that the electronic submission has been placed in the recipient's electronic mailbox.

(4) Proof of service, stating the name and address of the person on whom served and the manner and date of service, shall be shown for each document filed, by—

(i) Electronic acknowledgment ("delivery receipt"); or

(ii) The affidavit of the person making the service; or

(iii) The certificate of counsel.

(5) One signed paper copy of each filing shall be served promptly on the Secretary by regular mail pursuant to the requirements of § 2.708 and 2.701 of this part.

(6) All Board and Commission issuances and orders will be transmitted electronically to the parties, interested governmental participants, and the LSS Administration.

(d) Online access to the Licensing Support System, including a Protective Order File if authorized by a Board, shall be provided to the board(s), the representatives of the parties and interested governmental participants, and the witnesses while testifying, for use during the hearing. Use of paper copy and other images will also be permitted at the hearing.

§ 2.1014 Intervention.

(a)(1) Any person whose interest may be affected by a proceeding on the application for a license to receive and possess high-level radioactive waste at a geologic repository operations area pursuant to Part 60 of this chapter and who desires to participate as a party shall file a written petition for leave to intervene. In a proceeding noticed pursuant to § 2.105 of this part, any person whose interest may be affected may also request a hearing. The petition and/or request, and any request to participate under § 2.715(c) of this part, shall be filed within thirty days after the publication of the notice of hearing in the FEDERAL REGISTER. Nontimely filings will not be entertained absent a determination by the Commission, or the Hearing Licensing Board designated to rule on the petition and/or request, that the petition and/or request should be granted based upon a balancing of the following factors, in addition to satisfying those set out in paragraphs (a)(2) and (c) of this section:

(i) Good cause, if any, for failure to file on time;

(ii) The availability of other means whereby the petitioner's interest will be protected;

(iii) The extent to which the petitioner's participation may reasonably be expected to assist in developing a sound record;

(iv) The extent to which the petitioner's interest will be represented by existing parties;

(v) The extent to which the petitioner's participation will broaden the issues or delay the proceeding.

(2) The petition shall set forth with particularity—

(i) The interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding, including the reasons why petitioner should be permitted to intervene, with particular reference to the factors in paragraph (c) of this section;

(ii) A list of the contentions that petitioner seeks to have litigated in the matter, and the bases for each contention set forth with reasonable specificity;

(iii) Reference to the specific documentary material, or the absence thereof that provides a basis for each contention; and

(iv) As to each contention, the specific regulatory or statutory requirement to which the contention is relevant.

(3) Any petitioner who fails to satisfy paragraphs (a)(2) (ii), (iii), and (iv) of this section with respect to at least one contention shall not be permitted to participate as a party.

(4) Any party may amend its contentions specified in paragraph (a)(2)(ii) of this section. The Hearing Licensing Board shall rule on any petition to amend such contentions based on the balancing of the factors specified in paragraph (a)(1) of this section. Petitions to amend that are based on information or issues raised in the Safety Evaluation Report (SER) issued by the NRC staff shall be made no later than forty days after the issuance of the SER. Any petition to amend contentions that is filed after this time shall include, in addition to the factors specified in paragraph (a)(1) of this section, a showing that a significant safety or environmental issue is involved or that the amended contention raises a material issue related to the performance evaluation anticipated by §§ 60.112 and 60.113 of this chapter.

(b) Any party or interested governmental participant may file an answer to a petition for leave to intervene or a petition to amend contentions within twenty days after service of the petition.

(c) Subject to paragraph (a)(3) of this section, the Commission, or the Hearing Licensing Board designated to rule on petitions to intervene and/or requests for hearing shall permit intervention, in any hearing on an application for a license to receive and possess high-level radioactive waste at a geologic repository operations area, by an affected unit of local government as defined in section 2(31) of the Nuclear Waste Policy Act of 1982, as amended, 42 U.S.C. 10101. In all other circumstances, the Commission or Board shall, in ruling on a petition for leave to intervene, consider the following factors, among other things:

(1) The nature of the petitioner's right under the Atomic Energy Act to be made a party to the proceeding;

(2) The nature and extent of the petitioner's property, financial, or other interest in the proceeding;

(3) The possible effect of any order that may be entered in the proceeding on the petitioner's interest;

(d) An order permitting intervention and/or directing a hearing may be conditioned on such terms as the Commission, or the designated Hearing Licensing Board may direct in the interests of:

(1) Restricting irrelevant, duplicative, or repetitive evidence and argument,

(2) Having common interests represented by a spokesman, and

(3) Retaining authority to determine priorities and control the compass of the hearing.

(e) In any case in which, after consideration of the factors set forth in paragraph (c) of this section, the Commission or the Hearing Licensing Board finds that the petitioner's interest is limited to one or more of the issues involved in the proceeding, any order allowing intervention shall limit the petitioner's participation accordingly.

(f) A person permitted to intervene becomes a party to the proceeding, subject to any limitations imposed pursuant to paragraph (e) of this section.

(g) Unless otherwise expressly provided in the order allowing intervention, the granting of a petition for leave to intervene does not change or enlarge the issues specified in the notice of hearing.

§ 2.1015 Appeals.

(a) No appeals from any Board order or decision issued under this subpart are permitted, except as prescribed in paragraphs (b), (c), (d), and (e) of this section.

(b) A notice of appeal from (1) a Pre-License Application Licensing Board order issued pursuant to § 2.1010 of this subpart, (2) a Hearing Licensing Board First or Second Prehearing Conference Order issued pursuant to § 2.1021 or § 2.1022 of this subpart, (3) a Hearing Licensing Board order granting or denying a motion for summary disposition issued in accordance with § 2.749 of this part, or (4) a Hearing Licensing Board order granting or denying a petition to amend one or more contentions pursuant to § 2.1014(a)(4) of this subpart, shall be filed with the Atomic Safety and Licensing Appeal Board no later than ten (10) days after service of the orde A supporting brief shall accompan the notice of appeal. Any other party interested governmental participan or potential party may file a brief i opposition to the appeal no later tha ten days after service of the appeal.

(c) Appeals from a Hearing Licen ing Boards initial decision or parti initial decision shall be filed an briefed before the Atomic Safety an Licensing Appeal Board in accordanc with the requirements of § 2.762 this part.

(d) When, in the judgment of Board, prompt appellate review of a order not immediately appealab under paragraph (b) of this section necessary to prevent detriment to th public interest or unusual delay or e pense, the Board may refer the rulin promptly to the Appeal Board or Com mission, as appropriate, and shall pr vide notice of this referral to the pa ties, interested governmental partic pants, or potential parties. The pa ties, interested governmental partic pants, or potential parties may also r quest that the Board certify, pursuan to § 2.718(i) of this part, rulings n immediately appealable under par graph (b) of this section.

(e) A party, interested governmen participant, or potential party ma seek Commission review of any Appe Board decision or order issued und this section in accordance with th procedures in § 2.786(b) of this part.

(f) Unless otherwise ordered, th filing of an appeal, petition for revie referral, or request for certification a ruling shall not stay the proceedin or extend the time for the perform ance of any act.

NOTE: Any appeal taken pursuant to th terms of this regulation after October 1990, shall be filed with the Commissi rather than with an Atomic Safety and censing Appeal Board notwithstanding a provisions of this regulation to the contra

[54 FR 14944, Apr. 14, 1989, as amended 55 FR 42945, Oct. 24, 1990]

§ 2.1016 Motions.

(a) All motions shall be addressed the Commission or, when a proceedin is pending before a Board, to th Board. All motions, unless made oral on the record, shall be filed according to the provisions of § 2.1013(c) of this subpart.

(b) A motion shall state with particularity the grounds and the relief sought, and shall be accompanied by any affidavits or other evidence relied on, and, as appropriate, a proposed form of order.

(c) Within ten days after service of a motion a party, potential party, or interested governmental participant may file an answer in support of or in opposition to the motion, accompanied by affidavits or other evidence. The moving party shall have no right to reply, except as permitted by the Board or the Secretary or the Assistant Secretary.

(d) The Board may dispose of motions either by order or by ruling orally during the course of a prehearing conference or hearing.

(e) Where the motion in question is a motion to compel discovery under § 2.720(h)(2) of this part or § 2.1018(f) of this subpart, parties, potential parties, and interested governmental participants may file answers to the motion pursuant to paragraph (c) of this section. The Board in its discretion, may order that the answer be given orally during a telephone conference or other prehearing conference, rather than filed electronically. If responses are given over the telephone the Board shall issue a written order on the motion which summarizes the views presented by the parties, potential parties, and interested governmental participants unless the conference has been transcribed. This does not preclude the Board from issuing a prior oral ruling on the matter which is effective at the time of its issuance, provided that the terms of the ruling are incorporated in the subsequent written order.

§ 2.1017 Computation of time.

In computing any period of time, the day of the act, event, or default after which the designated period of time begins to run is not included. The last day of the period so computed is included unless it is a Saturday, Sunday, or legal holiday at the place where the action or event is to occur, in which event the period runs until the end of the next day which is neither a Saturday, Sunday, nor holiday. Whenever a party, potential party, or interested governmental participant, has the right or is required to do some act within a prescribed period after the service of a notice or other document upon it, one day shall be added to the prescribed period. If the Licensing Support System is unavailable for more than four access hours of any day that would be counted in the computation of time, that day will not be counted in the computation of time.

§ 2.1018 Discovery.

(a)(1) Parties, potential parties, and interested governmental participants in the high-level waste licensing proceeding may obtain discovery by one or more of the following methods: Access to the documentary material in the Licensing Support System submitted pursuant to § 2.1003 of this subpart; entry upon land for inspection, access to raw data, or other purposes pursuant to § 2.1020 of this subpart; access to, or the production of, copies of documentary material for which bibliographic headers only have been submitted pursuant to § 2.1003 (c) and (d) of this subpart; depositions upon oral examination pursuant to § 2.1019 of this subpart; requests for admission pursuant to § 2.742 of this subpart; informal requests for information not available in the Licensing Support System, such as the names of witnesses and the subjects they plan to address; and interrogatories and depositions upon written questions, as provided in paragraph (a)(2) of this section.

(2) Interrogatories and depositions upon written questions may be authorized by order of the discovery master appointed under paragraph (g) of this section, or if no discovery master has been appointed, by order of the Hearing Licensing Board, in the event that the parties are unable, after informal good faith efforts, to resolve a dispute in a timely fashion concerning the production of information.

(b)(1) Parties, potential parties, and interested governmental participants, pursuant to the methods set forth in paragraph (a) of this section, may obtain discovery regarding any matter, not privileged, which is relevant to the licensing of the likely candidate site for a geologic repository, whether it relates to the claim or defense of the person seeking discovery or to the claim or defense of any other person. Except for discovery pursuant to §§ 2.1018(a)(2) and 2.1019 of this subpart, all other discovery shall begin during the pre-license application phase. Discovery pursuant to §§ 2.1018(a)(2) and 2.1019 of this subpart shall begin after the issuance of the first pre-hearing conference order under § 2.1021 of this subpart, and shall be limited to the issues defined in that order or subsequent amendments to the order. It is not ground for objection that the information sought will be inadmissible at the hearing if the information sought appears reasonably calculated to lead to the discovery of admissible evidence.

(2) A party, potential party, or interested governmental participant may obtain discovery of documentary material otherwise discoverable under paragraph (b)(1) of this section and prepared in anticipation of, or for the hearing by, or for another party's, potential party's, or interested governmental participant's representative (including its attorney, surety, indemnitor, insurer, or similar agent) only upon a showing that the party, potential party, or interested governmental participant seeking discovery has substantial need of the materials in the preparation of its case and that it is unable without undue hardship to obtain the substantial equivalent of the materials by other means. In ordering discovery of these materials when the required showing has been made, the Board shall protect against disclosure of the mental impressions, conclusions, opinions, or legal theories of an attorney or other representative of a party, potential party, or interested governmental participant concerning the proceeding.

(c) Upon motion by a party, potential party, interested governmental participant, or the person from whom discovery is sought, and for good cause shown, the Board may make any order that justice requires to protect a party, potential party, interested governmental participant, or other person from annoyance, embarrassment, oppression, or undue burden, delay, or expense, including one or more of the following: (1) That the discovery not be had; (2) that the discovery may be had only on specified terms and conditions, including a designation of the time or place; (3) that the discovery may be had only by a method of discovery other than that selected by the party, potential party, or interested governmental participant seeking discovery; (4) that certain matters not be inquired into, or that the scope of discovery be limited to certain matters; (5) that discovery be conducted with no one present except persons designated by the Board; (6) that, subject to the provisions of § 2.790 of this part, a trade secret or other confidential research, development, or commercial information not be disclosed or be disclosed only in a designated way; (7) that studies and evaluations not be prepared. If the motion for a protective order is denied in whole or in part, the Board may, on such terms and conditions as are just, order that any party, potential party, interested governmental participant or other person provide or permit discovery.

(d) Except as provided in paragraph (b) of this section, and unless the Board upon motion, for the convenience of parties, potential parties, interested governmental participants, and witnesses and in the interest of justice, orders otherwise, methods of discovery may be used in any sequence, and the fact that a party, potential party, or interested governmental participant is conducting discovery, whether by deposition or otherwise, shall not operate to delay any other party's, potential party's, or interested governmental participant's discovery.

(e) A party, potential party, or interested governmental participant who has included all documentary material relevant to any discovery request in the Licensing Support System or who has responded to a request for discovery with a response that was complete when made is under no duty to supplement its response to include information thereafter acquired, except as follows:

(1) To the extent that written interrogatories are authorized pursuant to paragraph (a)(2) of this section, a party or interested governmental participant is under a duty to seasonably supplement its response to any question directly addressed to (i) the identity and location of persons having knowledge of discoverable matters, and (ii) the identity of each person expected to be called as an expert witness at the hearing, the subject matter on which the witness is expected to testify, and the substance of the witness's testimony.

(2) A party, potential party, or interested governmental participant is under a duty seasonably to amend a prior response if it obtains information upon the basis of which (i) it knows that the response was incorrect when made, or (ii) it knows that the response though correct when made is no longer true and the circumstances are such that a failure to amend the response is in substance a knowing concealment.

(3) A duty to supplement responses may be imposed by order of the Board of agreement to the parties, potential parties, and interested governmental participants.

(f)(1) If a deponent of a party, potential party, or interested governmental participant upon whom a request for discovery is served fails to respond or objects to the request, or any part thereof, the party, potential party, or interested governmental participant submitting the request or taking the deposition may move the Board, within five days after the date of the response or after failure to respond to the request, for an order compelling a response in accordance with the request. The motion shall set forth the nature of the questions or the request, the response or objection of the party, potential party, interested governmental participant, or other person upon whom the request was served, and arguments in support of the motion. For purposes of this paragraph, an evasive or incomplete answer or response shall be treated as a failure to answer or respond. Failure to answer or respond shall not be excused on the ground that the discovery sought is objectionable unless the person, party, potential party, or interested governmental participant failing to answer or respond has applied for a protective order pursuant to paragraph (c) of this section.

(2) In ruling on a motion made pursuant to this section, the Board may make such a protective order as it is authorized to make on a motion made pursuant to paragraph (c) of this section.

(3) An independent request for issuance of a subpoena may be directed to a nonparty for production of documents. This section does not apply to requests for the testimony of the NRC regulatory staff pursuant to § 2.720(h)(2)(i) of this part.

(g) The Hearing Licensing Board pursuant to § 2.722 of this part may appoint a discovery master to resolve disputes between parties concerning informal requests for information as provided in paragraphs (a)(1) and (a)(2) of this section.

§ 2.1019 Depositions.

(a) Any party or interested governmental participant desiring to take the testimony of any person by deposition on oral examination shall, without leave of the Commission or the Hearing Licensing Board, give reasonable notice in writing to every other party and interested governmental participant, to the person to be examined, and to the Hearing Licensing Board of the proposed time and place of taking the deposition; the name and address of each person to be examined, if known, or if the name is not known, a general description sufficient to identify him or her or the class or group to which he or she belongs, the matters upon which each person will be examined and the name or descriptive title and address of the officer before whom the deposition is to be taken.

(b) Within the United States, a deposition may be taken before any officer authorized to administer oaths by the laws of the United States or of the place where the examination is held. Outside of the United States, a deposition may be taken before a secretary of an embassy or legation, a consul general, vice consul or consular agent of the United States, or a person authorized to administer oaths designated by the Commission. Depositions may be conducted by telephone or by video teleconference at the option of the party or interested governmental participant taking the deposition.

(c) The deponent shall be sworn or shall affirm before any questions are put to him or her. Examination and cross-examination shall proceed as at a hearing. Each question propounded shall be recorded and the answer taken down in the words of the witness. Objections on questions of evidence shall be noted in short form without the arguments. The officer shall not decide on the competency, materiality, or relevancy of evidence but shall record the evidence subject to objection. Objections on questions of evidence not made before the officer shall not be deemed waived unless the ground of the objection is one which might have been obviated or removed if presented at that time.

(d) When the testimony is fully transcribed, the deposition shall be submitted to the deponent for examination and signature unless the deponent is ill or cannot be found or refuses to sign. The officer shall certify the deposition or, if the deposition is not signed by the deponent, shall certify the reasons for the failure to sign, and shall promptly transmit the deposition to the LSS Administrator for submission into the Licensing Support System.

(e) Where the deposition is to be taken on written questions as authorized under § 2.1018(a)(2) of this subpart, the party or interested governmental participant taking the deposition shall serve a copy of the questions, showing each question separately and consecutively numbered, on every other party and interested governmental participant with a notice stating the name and address of the person who is to answer them, and the name, description, title, and address of the officer before whom they are to be asked. Within ten days after service, any other party or interested governmental participant may serve cross-questions. The questions, cross-questions, and answers shall be recorded and signed, and the deposition certified, returned, and transmitted to the LSS Administrator as in the case of a deposition on oral examination.

(f) A deposition will not become a part of the evidentiary record in the hearing unless received in evidence. If only part of a deposition is offered in evidence by a party or interested governmental participant, any other party or interested governmental participant may introduce any other parts. A party or interested governmental participant shall not be deemed to make a person its own witness for any purpose by taking his or her deposition.

(g) A deponent whose deposition is taken and the officer taking a deposition shall be entitled to the same fees as are paid for like services in the district courts of the United States, to be paid by the party or interested governmental participant at whose instance the deposition is taken.

(h) The deponent may be accompanied, represented, and advised by legal counsel.

(i)(1) After receiving written notice of the deposition under paragraph (a) or paragraph (e) of this section, and ten days before the scheduled date of the deposition, the deponent shall submit an index of all documents in his or her possession, relevant to the subject matter of the deposition, including the categories of documents set forth in paragraph (i)(2) of this section, to all parties and interested governmental participants. The index shall identify those records which have already been entered into the Licensing Support System. All documents that are not identical to documents already in the Licensing Support System, whether by reason of subsequent modification or by the addition of notations, shall be treated as separate documents.

(2) The following material is excluded from initial entry into the Licensing Support System, but is subject to derivative discovery under paragraph (i)(1) of this section—

(i) Personal records;

(ii) Travel vouchers;

(iii) Speeches;

(iv) Preliminary drafts;

(v) Marginalia.

(3) Subject to paragraph (i)(6) of this section, any party or interested

governmental participant may request from the deponent a paper copy of any or all of the documents on the index that have not already been entered into the Licensing Support System.

(4) Subject to paragraph (i)(6) of this section, the deponent shall bring a paper copy of all documents on the index that the deposing party or interested governmental participant requests that have not already been entered into the Licensing Support System to an oral deposition conducted pursuant to paragraph (a) of this section, or in the case of a deposition taken on written questions pursuant to paragraph (e) of this section, shall submit such documents with the certified deposition.

(5) Subject to paragraph (i)(6) of this section, a party or interested governmental participant may request that any or all documents on the index that have not already been entered into the Licensing Support System, and on which it intends to rely at hearing, be entered into the LSS by the deponent.

(6) The deposing party or interested governmental participant shall assume the responsibility for the obligations set forth in paragraphs (i)(1), (i)(3), (i)(4), and (i)(5) of this section when deposing someone other than a party or interested governmental participant.

(j) In a proceeding in which the NRC is a party, the NRC staff will make available one or more witnesses designated by the Executive Director for Operations, for oral examination at the hearing or on deposition regarding any matter, not privileged, which is relevant to the issues in the proceeding. The attendance and testimony of the Commissioners and named NRC personnel at a hearing or on deposition may not be required by the Board, by subpoena or otherwise: *Provided*, That the Board may, upon a showing of exceptional circumstances, such as a case in which a particular named NRC employee has direct personal knowledge of a material fact not known to the witnesses made available by the Executive Director for Operations, require the attendance and testimony of named NRC personnel.

§ 2.1020 Entry upon land for inspection.

(a) Any party, potential party, or interested governmental participant may serve on any other party, potential party, or interested governmental participant a request to permit entry upon designated land or other property in the possession or control of the party, potential party, or interested governmental participant upon whom the request is served for the purpose of access to raw data, inspection and measuring, surveying, photographing, testing, or sampling the property or any designated object or operation thereon, within the scope of § 2.1018 of this subpart.

(b) The request may be served on any party, potential party, or interested governmental participant without leave of the Commission or the Board.

(c) The request shall describe with reasonable particularity the land or other property to be inspected either by individual item or by category. The request shall specify a reasonable time, place, and manner of making the inspection and performing the related acts.

(d) The party, potential party, or interested governmental participant upon whom the request is served shall serve on the party, potential party, or interested governmental participant submitting the request a written response within ten days after the service of the request. The response shall state, with respect to each item or category, that inspection and related activities will be permitted as requested, unless the request is objected to, in which case the reasons for objection shall be stated. If objection is made to part of an item or category, the part shall be specified.

§ 2.1021 First prehearing conference.

(a) In any proceeding involving an application for a license to receive and possess high-level radioactive waste at a geologic repository operations area pursuant to Part 60 of this chapter the Commission or the Hearing Licensing Board will direct the parties, interested governmetal participants and any petitioners for intervention, or their counsel, to appear at a specified time and place, within seventy days after the notice of hearing is published, or such other time as the Commission or the Hearing Licensing Board may deem appropriate, for a conference to:

(1) Permit identification of the key issues in the proceeding;

(2) Take any steps necessary for further identification of the issues;

(3) Consider all intervention petitions to allow the Hearing Licensing Board to make such preliminary or final determination as to the parties and interested governmental participants, as may be appropriate;

(4) Establish a schedule for further actions in the proceeding; and

(5) Establish a discovery schedule for the proceeding taking into account the objective of meeting the three year time schedule specified in section 114(d) of the Nuclear Waste Policy Act of 1982, as amended, 42 U.S.C. 10134(d).

(b) The Board may order any further formal and informal conferences among the parties and interested governmental participants including teleconferences, to the extent that it considers that such a conference would expedite the proceeding.

(c) A prehearing conference held pursuant to this section shall be stenographically reported.

(d) The Board shall enter an order which recites the action taken at the conference, the schedule for further actions in the proceeding, and any agreements by the parties, and which identifies the key issues in the proceeding, makes a preliminary or final determination as to the parties and interested governmental participants in the proceeding, and provides for the submission of status reports on discovery.

§ 2.1022 Second prehearing conference.

(a) The Commission or the Hearing Licensing Board in a proceeding on an application for a license to receive and possess high-level radioactive waste at a geologic repository operations area shall direct the parties, interested governmental participants, or their counsel to appear at a specified time and place not later than seventy days after the Safety Evaluation Report is issued by the NRC staff for a conference to consider:

(1) Any amended contentions submitted under § 2.1014(a)(4) of this subpart;

(2) Simplification, clarification, and specification of the issues;

(3) The obtaining of stipulations and admissions of fact and of the contents and authenticity of documents to avoid unnecessary proof;

(4) Identification of witnesses and the limitation of the number of expert witnesses, and other steps to expedite the presentation of evidence;

(5) The setting of a hearing schedule;

(6) Establishing a discovery schedule for the proceeding taking into account the objective of meeting the three year time schedule specified in section 114(d) of the Nuclear Waste Policy Act of 1982, as amended, 42 U.S.C. 10134(d); and

(7) Such other matters as may aid in the orderly disposition of the proceeding.

(b) A prehearing conference held pursuant to this section shall be stenographically reported.

(c) The Board shall enter an order which recites the action taken at the conference and the agreements by the parties, limits the issues or defines the matters in controversy to be determined in the proceeding, sets a discovery schedule, and sets the hearing schedule.

§ 2.1023 Immediate effectiveness.

(a) Pending review and final decision by the Commission, an initial decision resolving all issues before the Hearing Licensing Board in favor of issuance or amendment of a construction authorization pursuant to § 60.31 of this chapter or a license to receive and possess high-level radioactive waste at a geologic repository operations area pursuant to § 60.41 of this chapter, will be immediately effective upon issuance except—

(1) As provided in any order issued in accordance with § 2.788 of this part that stays the effectiveness of an initial decision; or

(2) As otherwise provided by the Commission in special circumstances.

(b) The Director of Nuclear Material Safety and Safegurds, notwithstanding the filing or pendency of an appeal or a petition for review pursuant to § 2.1015 of this subpart, promptly shall issue a construction authorization or a license to receive and possess high-level radioactive waste at a geologic respository operations area, or amendments thereto, following an initial decision resolving all issues before the Hearing Licensing Board in favor of the licensing action, upon making the appropriate licensing findings, except—

(1) As provided in paragraph (c) of this section; or

(2) As provided in any order issued in accordance with § 2.788 of this part that stays the effectiveness of an initial decision; or

(3) As otherwise provided by the Commission in special circumstances.

(c)(1) Before the Director of Nuclear Material Safety and Safeguards may issue a construction authorization or a license to receive and possess waste at a geologic repository operations area in accordance with paragraph (b) of this section, the Commission, in the exercise of its supervisory authority over agency proceedings, shall undertake and complete a supervisory examination of those issues contested in the proceeding before the Hearing Licensing Board to consider whether there is any significant basis for doubting that the facility will be constructed or operated with adequate protection of the public health and safety, and whether the Commission should take action to suspend or to otherwise condition the effectiveness of a Hearing Licensing Board decision that resolves contested issues in a proceeding in favor of issuing a construction authorization or a license to receive and possess high-level radioactive waste at a geologic repository operations area. This supervisory examination is not part of the adjudicatory proceeding. The Commission shall notify the Director in writing when its supervisory examination conducted in accordance with this paragraph has been completed.

(2) Before the Director of Nuclear Material Safety and Safeguards issues a construction authorization or a license to receive and possess high-level radioactive waste at a geologic repository operations area, the Commission shall review those issues that have not been contested in the proceeding before the Hearing Licensing Board but about which the Director must make appropriate findings prior to the issuance of such a license. The Director shall issue a construction authorization or a license to receive and possess high-level radioactive waste at a geologic repository operations area only after written notification from the Commission of its completion of its review under this paragraph and of its determination that it is appropriate for the Director to issue such a construction authorization or license. This Commission review of uncontested issues is not part of the adjudicatory proceeding.

(3) No suspension of the effectiveness of a Hearing Licensing Board's initial decision or postponement of the Director's issuance of a construction authorization or license that results from a Commission supervisory examination of contested issues under paragraph (c)(1) of this section or a review of uncontested issues under paragraph (c)(2) of this section will be entered except in writing with a statement of the reasons. Such suspension or postponement will be limited to such period as is necessary for the Commission to resolve the matters at issue. If the supervisory examination results in a suspension of the effectiveness of the Hearing Licensing Board's initial decision under paragraph (c)(1) of this section, the Commission will take review of the decision sua sponte and further proceedings relative to the contested matters at issue will be in accordance with procedures for participation by the DOE, the NRC staff, or other parties and interested governmental participants to the Hearing Licensing Board proceeding established by the Commission in its written statement of reasons. If a postponement results from a review under paragraph (c)(2) of this section, comments on the uncontested matters at issue may be filed by the DOE within ten days of service of the Commission's written statement.

Subpart K—Hybrid Hearing Procedures for Expansion of Spent Nuclear Fuel Storage Capacity at Civilian Nuclear Power Reactors

SOURCE: 50 FR 41670, Oct. 15, 1985, unless otherwise noted.

§ 2.1101 Purpose.

The regulations in this subpart establish hybrid hearing procedures, as authorized by section 134 of the Nuclear Waste Policy Act of 1982 (96 Stat. 2230), to be used at the request of any party in certain contested proceedings on applications for a license or license amendment to expand the spent nuclear fuel storage capacity at the site of a civilian nuclear power plant. These procedures are intended to encourage and expedite onsite expansion of spent nuclear fuel storage capacity.

§ 2.1103 Scope.

The procedures in this subpart apply to contested proceedings on applications filed after January 7, 1983, for a license or license amendment under Part 50 of this chapter, to expand the spent fuel storage capacity at the site of a civilian nuclear power plant, through the use of high density fuel storage racks, fuel rod compaction, the transshipment of spent nuclear fuel to another civilian nuclear power reactor within the same utility system, the construction of additional spent nuclear fuel pool capacity or dry storage capacity, or by other means. This subpart also applies to proceedings on applications for a license under Part 72 of this chapter to store spent nuclear fuel in an independent spent fuel storage installation located at the site of a civilian nuclear power reactor. This subpart shall not apply to the first application for a license or license amendment to expand the spent fuel storage capacity at a particular site through the use of a new technology not previously approved by the Commission for use at any other nuclear power plant.

§ 2.1105 Definitions.

As used in this part:

(a) "Civilian nuclear power reactor" means a civilian nuclear power plant required to be licensed as a utilization facility under section 103 or 104(b) of the Atomic Energy Act of 1954.

(b) "Spent nuclear fuel" means fuel that has been withdrawn from a nuclear reactor following irradiation, the constituent elements of which have not been separated by reprocessing.

§ 2.1107 Notice of proposed action.

In connection with each application filed after January 7, 1983, for a license or an amendment to a license to expand the spent nuclear fuel storage capacity at the site of a civilian nuclear power plant, for which the Commission has not found that a hearing is required in the public interest, for which an adjudicatory hearing has not yet been convened, and for which a notice of proposed action has not yet been published as of the effective date of this subpart, the Commission will, prior to acting thereon, cause to be published in the FEDERAL REGISTER a notice of proposed action in accordance with § 2.105. The notice of proposed action will identify the availability of the hybrid hearing procedures in this subpart, specify that any party may invoke these procedures by filing a timely request for oral argument under § 2.1109, and provide that if a request for oral argument is granted any hearing held on the application shall be conducted in accordance with the procedures in this subpart.

§ 2.1109 Requests for oral argument.

(a)(1) Within ten (10) days after an order granting a request for hearing or petition for leave to intervene, any party may invoke the hybrid hearing procedures in this subpart by requesting an oral argument. Requests for oral argument shall be in writing and shall be filed with the presiding officer. The presiding officer shall grant a timely request for oral argument.

(2) The presiding officer may grant an untimely request for oral argument only upon a showing of good cause by the requesting party for failure to file on time and after providing the other parties an opportunity to respond to the untimely request.

(b) The presiding officer shall issue a written order ruling on any requests for oral argument. If the presiding officer grants a request for oral argument, the order shall include a schedule for discovery and subsequent oral argument with respect to the admitted contentions.

(c) If no party to the proceeding requests oral argument, or if all untimely requests for oral argument are denied, the presiding officer shall conduct the proceeding in accordance with Subpart G of 10 CFR Part 2.

§ 2.1111 Discovery.

Discovery shall begin and end at such times as the presiding officer shall order. It is expected that all discovery shall be completed within 90 days. The presiding officer may extend the time for discovery upon good cause shown based on exceptional circumstances and after providing the other parties an opportunity to respond to the request.

§ 2.1113 Oral argument.

(a) Fifteen (15) days prior to the date set for oral argument, each party, including the NRC staff, shall submit to the presiding officer a detailed written summary of all the facts, data, and arguments which are known to the party at such time and on which the party proposes to rely at the oral argument either to support or to refute the existence of a genuine and substantial dispute of fact. Each party shall also submit all supporting facts and data in the form of sworn written testimony or other sworn written submission. Each party's written summary and supporting information shall be simultaneously served on all other parties to the proceeding.

(b) Only facts and data in the form of sworn written testimony or other sworn written submission may be relied on by the parties during oral argument, and the presiding officer shall consider those facts and data only if they are submitted in that form.

§ 2.1115 Designation of issues for adjudicatory hearing.

(a) After due consideration of the oral presentation and the written facts and data submitted by the parties and relied on at the oral argument, the presiding officer shall promptly by written order:

(1) Designate any disputed issues of fact, together with any remaining issues of law, for resolution in an adjudicatory hearing; and

(2) Dispose of any issues of law or fact not designated for resolution in an adjudicatory hearing.

With regard to each issue designated for resolution in an adjudicatory hearing, the presiding officer shall identify the specific facts that are in genuine and substantial dispute, the reason why the decision of the Commission is likely to depend on the resolution of that dispute, and the reason why an adjudicatory hearing is likely to resolve the dispute. With regard to issues not designated for resolution in an adjudicatory hearing, the presiding officer shall include a brief statement of the reasons for the disposition. If the presiding officer finds that there are no disputed issues of fact or law requiring resolution in an adjudicatory hearing, the presiding officer shall also dismiss the proceeding.

(b) No issue of law or fact shall be designated for resolution in an adjudicatory hearing unless the presiding officer determines that:

(1) There is a genuine and substantial dispute of fact which can only be resolved with sufficient accuracy by the introduction of evidence in an adjudicatory hearing; and

(2) The decision of the Commission is likely to depend in whole or in part on the resolution of that dispute.

(c) In making a determination under paragraph (b) of this section, the presiding officer shall not consider:

(1) Any issue relating to the design, construction, or operation of any civilian nuclear power reactor already licensed to operate at the site, or any civilian nuclear power reactor for which a construction permit has been granted at the site, unless the presiding officer determines that any such issue substantially affects the design, construction, or operation of the facility or activity for which a license application, authorization, or amendment to expand the spent nuclear fuel storage capacity is being considered; or

(2) Any siting or design issue fully considered and decided by the Commission in connection with the issuance of a construction permit or operating license for a civilian nuclear power reactor at that site, unless (i) such issue results from any revision of siting or design criteria by the Commission following such decision; and (ii) the presiding officer determines that such issue substantially affects the design, construction, or operation of the facility or activity for which a license application, authorization, or amendment to expand the spent nuclear fuel storage capacity is being considered.

(d) The provisions of paragraph (c) of this section shall apply only with respect to licenses, authorizations, or amendments to licenses or authorizations applied for under the Atomic Energy Act of 1954, as amended, before December 31, 2005.

(e) Unless the presiding officer disposes of all issues and dismisses the proceeding, appeals from the presiding officer's order disposing of issues and designating one or more issues for resolution in an adjudicatory hearing are interlocutory and must await the end of the proceeding.

[50 FR 41671, Oct. 15, 1985; 50 FR 45398, Oct. 31, 1985]

§ 2.1117 Applicability of other sections.

In proceedings subject to this subpart, the provisions of Subparts A and G of 10 CFR Part 2 are also applicable, except where inconsistent with the provisions of this subpart.

Subpart L—Informal Hearing Procedures for Adjudications in Materials and Operator Licensing Proceedings

SOURCE: 54 FR 8276, Feb. 28, 1989, unless otherwise noted.

§ 2.1201 Scope of subpart.

(a) The general rules of this subpart govern procedure in any adjudication initiated by a request for a hearing in a proceeding for—

(1) The grant, transfer, renewal, or licensee-initiated amendment of a materials license subject to parts 30, 32 through 35, 39, 40, or 70 of this chapter; or

(2) The grant, renewal, or licensee-initiated amendment of an operator or senior operator license subject to part 55 of this chapter.

(b) Any adjudication regarding a materials license subject to parts 30, 32 through 35, 39, 40, or 70, or an operator or senior operator license subject to part 55 that is initiated by a notice of hearing issued under § 2.104, a notice of proposed action under § 2.105, or a request for hearing under subpart B of 10 CFR part 2 on an order to show cause, an order for modification of license, or a civil penalty, is to be conducted in accordance with the procedures set forth in subpart G to 10 CFR part 2.

[55 FR 36806, Sept. 7, 1990]

§ 2.1203 Docket; filing; service.

(a) The Secretary shall maintain a docket for each adjudication subject to this subpart, commencing with the filing of a request for a hearing. All papers, including any request for a hearing, petition for leave to intervene, correspondence, exhibits, decisions, and orders, submitted or issued in the proceeding; the hearing file compiled in accordance with § 2.1231; and the transcripts of any oral presentations or oral questioning made in accordance with § 2.1235 or in connection with any appeal under this subpart must be filed with the Office of the Secretary and must be included in the docket. The public availability of official records relating to the proceeding is governed by § 2.790.

(b) Documents are filed with the Office of the Secretary in adjudications subject to this subpart either—

(1) By delivery to the Docketing and Service Branch of the Office of the Secretary at One White Flint North, 11555 Rockville Pike, Rockville, MD 20852; or

(2) By mail or telegram addressed to the Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Service Branch.

Filing by mail or telegram is complete as of the time of deposit in the mail or with the telegraph company.

Filing by other means is complete as of the time of delivery to the Docketing and Service Branch of the Office of the Secretary.

(c) Each document submitted for filing in an adjudication subject to this part, other than an exhibit, must be legibly typed, must bear the docket number and the title of the proceeding, and, if it is the first document filed by that participant, must designate the name and address of a person upon whom service can be made. The document also must be signed in accordance with § 2.708(c). A document, other than correspondence, must be filed in an original and two conforming copies. Documents filed by telegram are governed by § 2.708(f). A document that fails to conform to these requirements may be refused acceptance for filing and may be returned with an indication of the reason for nonacceptance. Any document tendered but not accepted for filing may not be entered in the docket.

(d) Computation of time and extension and reduction of time limits is done in accordance with §§ 2.710-2.711.

(e) A request for a hearing or a petition for leave to intervene must be served in accordance with § 2.712 and § 2.1205(e), (j). All other documents issued by the presiding officer, the Atomic Safety and Licensing Appeal Board, or the Commission or offered for filing are served in accordance with § 2.712.

§ 2.1205 Request for a hearing; petition for leave to intervene.

(a) Any person whose interest may be affected by a proceeding for the grant, transfer, renewal, or licensee-initiated amendment of a license subject to this subpart may file a request for a hearing.

(b) An applicant for a license, a license amendment, a license transfer, or a license renewal who is issued a notice of proposed denial or a notice of denial and who desires a hearing shall file the request for the hearing within the time specified in § 2.103 in all cases. An applicant may include in the request for hearing a request that the presiding officer recommend to the Commission that procedures other than those authorized under this subpart be used in the proceeding, provided that the applicant identifies the special factual circumstances or issues which support the use of other procedures.

(c) A person other than an applicant shall file a request for a hearing within—

(1) Thirty (30) days of the agency's publication of the initial FEDERAL REGISTER notice referring or relating to an application or the licensing action requested by an application, which must include a reference to the opportunity for a hearing under the procedures set forth in this subpart; or

(2) If a FEDERAL REGISTER notice is not published in accordance with paragraph (c)(1), the earlier of—

(i) Thirty (30) days after the requestor receives actual notice of a pending application or an agency action granting an application; or

(ii) One hundred and eighty (180) days after agency action granting an application.

(d) The request for a hearing filed by a person other than an applicant must describe in detail—

(1) The interest of the requestor in the proceeding;

(2) How that interest may be affected by the results of the proceeding, including the reasons why the requestor should be permitted a hearing, with particular reference to the factors set out in paragraph (g) of this section;

(3) The requestor's areas of concern about the licensing activity that is the subject matter of the proceeding; and

(4) The circumstances establishing that the request for a hearing is timely in accordance with paragraph (c) of this section.

(e) Each request for a hearing must be served, by delivering it personally or by mail to—

(1) The applicant (unless the requestor is the applicant); and

(2) The NRC staff, by delivery to the Executive Director for Operations, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852, or by mail addressed to the Executive Director for Operations, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

(f) Within ten (10) days of service of a request for a hearing filed under paragraph (c) of this section, the applicant may file an answer. The NRC staff, if it chooses or is ordered to participate as a party in accordance with § 2.1213, may file an answer to a request for a hearing within ten (10) days of the designation of the presiding officer.

(g) In ruling on a request for a hearing filed under paragraph (c) of this section, the presiding officer shall determine that the specified areas of concern are germane to the subject matter of the proceeding and that the petition is timely. The presiding officer also shall determine that the requestor meets the judicial standards for standing and shall consider, among other factors—

(1) The nature of the requestor's right under the Act to be made a party to the proceeding;

(2) The nature and extent of the requestor's property, financial, or other interest in the proceeding; and

(3) The possible effect of any order that may be entered in the proceeding upon the requestor's interest.

(h) If a hearing request filed under paragraph (b) of this section is granted, the applicant and the NRC staff shall be parties to the proceeding. If a hearing request filed under paragraph (c) of this section is granted, the requestor shall be a party to the proceeding along with the applicant and the NRC staff, if the staff chooses or is ordered to participate as a party in accordance with § 2.1213.

(i) If a request for a hearing is granted and a notice of the kind described in paragraph (c)(1) previously has not been published in the FEDERAL REGISTER, a notice of hearing must be published in the FEDERAL REGISTER stating—

(1) The time, place, and nature of the hearing;

(2) The authority under which the hearing is to be held;

(3) The matters of fact and law to be considered;

(4) The time within which any other person whose interest may be affected by the proceeding may petition for leave to intervene, as specified in paragraph (j) of this section; and

(5) The time within which a request to participate under § 2.1211(b) must be filed.

(j) Any petition for leave to intervene must be filed within thirty (30) days of the date of publication of the notice of hearing. The petition must set forth the information required under paragraph (d) of this section.

(1) A petition for leave to intervene must be served upon the applicant. The petition also must be served upon the NRC staff—

(i) By delivery to the Executive Director for Operations, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852; or

(ii) By mail addressed to the Executive Director for Operations, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

(2) Within ten (10) days of service of a petition for leave to intervene, the applicant and the NRC staff, if the staff chooses or is ordered to participate as a party in accordance with § 2.1213, may file an answer.

(3) Thereafter, the petition for leave to intervene must be ruled upon by the presiding officer, taking into account the matters set forth in paragraph (g) of this section.

(4) If the petition is granted, the petitioner becomes a party to the proceeding.

(k)(1) A request for a hearing or a petition for leave to intervene found by the presiding officer to be untimely under paragraph (c) or (j) will be entertained only upon determination by the Commission or the presiding officer that the requestor or petitioner has established that—

(i) The delay in filing the request for a hearing or the petition for leave to intervene was excusable; and

(ii) The grant of the request for a hearing or the petition for leave to intervene will not result in undue prejudice or undue injury to any other participant in the proceeding, including the applicant and the NRC staff, if the staff chooses or is ordered to participate as a party in accordance with § 2.1213.

(2) If the request for a hearing on the petition for leave to intervene is found to be untimely and the requestor or petitioner fails to establish that

it otherwise should be entertained under paragraph (k)(1) of this section, the request or petition will be treated as a petition under § 2.206 and referred for appropriate disposition.

(l) The filing or granting of a request for a hearing or petition for leave to intervene need not delay NRC staff action regarding an application for a licensing action covered by this subpart.

(m) An order granting a request for a hearing or a petition for leave to intervene may condition or limit participation in the interest of avoiding repetitive factual presentations and argument.

(n) If the presiding officer denies a request for a hearing or a petition for leave to intervene in its entirety, the action is appealable within ten (10) days of service of the order on the question whether the request for a hearing or the petition for leave to intervene should have been granted in whole or in part. If a request for a hearing or a petition for leave to intervene is granted, parties other than the requestor or petitioner may appeal that action within ten (10) days of service of the order on the question whether the request for a hearing or the petition for leave to intervene should have been denied in its entirety. An appeal may be taken by filing and serving upon all parties a statement that succinctly sets out, with supporting argument, the errors alleged. The appeal may be supported or opposed by any party by filing a counter-statement within fifteen (15) days of the service of the appeal brief.

[54 FR 8276, Feb. 28, 1989, as amended at 55 FR 36806, Sept. 7, 1990]

§ 2.1207 Designation of presiding officer.

(a) Unless otherwise ordered by the Commission or as provided in paragraph (b) of this section, within ten (10) days of receiving from the Office of the Secretary a request for a hearing relating to a licensing proceeding covered by this subpart, the Chairman of the Atomic Safety and Licensing Board Panel shall issue an order designating a single member of the panel to rule on the request for a hearing and, if necessary, to serve as the presiding officer to conduct the hearing.

(b) For any request for hearing relating to an application under 10 CFR Part 70 to receive and store unirradiated fuel at the site of a production or utilization facility that also is the subject of a proceeding under Subpart G of this Part for the issuance of an operating license, within ten (10) days of receiving from the Office of the Secretary a request for a hearing the Chairman of the Atomic Safety and Licensing Board Panel shall issue an order designating a Licensing Board conducting the operating license proceeding to rule on the request for a hearing and, if necessary, to conduct the hearing in accordance with this Subpart. Upon certification to the Commission by the Licensing Board designated to conduct the hearing that the matters presented for adjudication by the parties with respect to the Part 70 application are substantially the same as those being heard in the pending proceeding under 10 CFR Part 50, the Licensing Board may conduct the hearing in accordance with the procedures in Subpart G.

§ 2.1209 Power of presiding officer.

A presiding officer has the duty to conduct a fair and impartial hearing according to law, to take appropriate action to avoid delay, and to maintain order. The presiding officer has all powers necessary to those ends, including the power to—

(a) Regulate the course of the hearing and the conduct of the participants;

(b) Dispose of procedural requests or similar matters;

(c) Hold conferences before or during the hearing for settlement, simplification of the issues, or any other proper purpose;

(d) Certify questions to the Atomic Safety and Licensing Appeal Board for determination, either in the presiding officer's discretion or on direction of the Commission or the Atomic Safety and Licensing Appeal Board;

(e) Reopen a closed record for the reception of further information at any time prior to initial decision in accordance with § 2.734;

(f) Administer oaths and affirmations;

(g) Issue initial decisions;

(h) Issue subpoenas requiring the attendance and testimony of witnesses at the hearing or the production of documents for the hearing;

(i) Receive written or oral evidence and take official notice of any fact in accordance with § 2.743(i);

(j) Appoint special assistants from the Atomic Safety and Licensing Board Panel in accordance with § 2.722;

(k) Recommend to the Commission that procedures other than those authorized under this subpart be used in a particular proceeding; and

(l) Take any other action consistent with the Act and this chapter.

§ 2.1211 Participation by a person not a party.

(a) The presiding officer may permit a person who is not a party to make a limited appearance in order to state his or her views on the issues. Limited appearances may be in writing or oral, at the discretion of the presiding officer, and are governed by rules adopted by the presiding officer. A limited appearance statement is not to be considered part of the decisional record under § 2.1251(c).

(b) Within thirty days of an order granting a request for a hearing made under § 2.1205(b)-(c) or, in instances when it is published, within thirty days of a notice of hearing issued under § 2.1205(i), the representative of an interested State, county, municipality, or an agency thereof, may request an opportunity to participate in a proceeding under this subpart. The request for an opportunity to participate must state with reasonable specificity the requestor's areas of concern about the licensing activity that is the subject matter of the proceeding. Upon receipt of a request that is filed in accordance with these time limits and that specifies the requestor's areas of concern, the presiding officer shall afford the representative a reasonable opportunity to make written and oral presentations in accordance with §§ 2.1233 and 2.1235, without requiring the representative to take a position with respect to the issues. Participants under this subsection may notice an appeal of an initial decision in accordance with § 2.1253 with respect to any issue on which they participate.

§ 2.1213 Role of the NRC staff.

If a hearing request is filed under § 2.1205(b), the NRC staff shall be a party to the proceeding. If a hearing request is filed under § 2.1205(c), within ten (10) days of the designation of a presiding officer pursuant to § 2.1207 the NRC staff shall notify the presiding officer whether or not the staff desires to participate as a party to the adjudication. In addition, upon a determination by the presiding officer that the resolution of any issue in the proceeding would be aided materially by staff's participation in the proceeding as a party, the presiding officer may order or permit the NRC staff to participate as a party with respect to that particular issue.

[54 FR 8278, Feb. 28, 1989; 54 FR 53035, Dec. 26, 1989]

§ 2.1215 Appearance and practice.

(a) An individual may appear in an adjudication under this subpart on his or her own behalf or by an attorney-at-law. Representation by an attorney-at-law is not necessary in order for an organization or a § 2.1211(b) participant to appear in an adjudication conducted under this subpart. If the representative of an organization is not an attorney-at-law, he or she shall be a member or officer of the organization represented. Upon request of the presiding officer, an individual acting as a representative shall provide appropriate information establishing the basis of his or her authority to act in a representational capacity.

(b) Any action to reprimand, censure, or suspend a party, a § 2.1211(b) participant, or the representative of a party or a § 2.1211(b) participant must be in accordance with the procedures in § 2.713(c).

HEARINGS

§ 2.1231 Hearing file; prohibition on discovery.

(a) Within thirty (30) days of the presiding officer's entry of an order granting a request for a hearing, the NRC staff shall file in the docket, present to the presiding officer, and make available to the applicant and any other party to the proceeding a hearing file. Thereafter, within ten (10) days of the date a petition for leave to intervene or a request to participate under § 2.1211(b) is granted, the NRC staff shall make the hearing file available to the petitioner or the § 2.1211(b) participant.

(1) The hearing file must be made available to the applicant and any other party or § 2.1211(b) participant to the proceeding either by—

(i) Service in accordance with § 2.1203(e); or

(ii) Placing the file in an established local public document room in the vicinity of the principal location where nuclear material that is the subject of a proceeding under this subpart will be possessed, and informing the applicant, party, or § 2.1211(b) participant in writing of its action and the location of the file. If an established local public document room does not exist, the NRC staff will arrange for the documents contained in the hearing file, along with any other material docketed in accordance with § 2.1203, to be made available for public inspection and copying during the course of the adjudication in a library or other facility that is accessible to the general public during regular business hours and is in the vicinity of the principal location where the nuclear material that is the subject of the proceeding will be possessed.

(2) The hearing file also must be made available for public inspection and copying during regular business hours at the NRC Public Document Room in Washington, DC.

(b) The hearing file will consist of the application and any amendment thereto, any NRC environmental impact statement or assessment relating to the application, and any NRC report and any correspondence between the applicant and the NRC that is relevant to the application. Hearing file documents already in an established local public document room or the NRC Public Document Room when the hearing request is granted may be incorporated into the hearing file at those locations by a reference indicating where at those locations the documents can be found. The presiding officer shall rule upon any issue regarding the appropriate materials for the hearing file.

(c) The NRC staff has a continuing duty to keep the hearing file up to date with respect to the materials set forth in paragraph (b) of this section and to provide those materials for the docket, the presiding officer, and the applicant or any party or § 2.1211(b) participant in a manner consistent with the way the hearing file was made available initially under paragraph (a).

(d) A party or § 2.1211(b) participant may not seek discovery from any other party, § 2.1211(b) participant, or the NRC or its personnel, whether by document production, deposition, interrogatories, or otherwise.

§ 2.1233 Written presentations: written questions.

(a) After publication of a notice of hearing in accordance with § 2.1205(i) and after the NRC staff has made the hearing file available in accordance with § 2.1231, the parties and § 2.1211(b) participants shall be afforded the opportunity to submit, under oath or affirmation, written presentations of their arguments and documentary data, informational material, and other supporting written evidence at the time or times and in the sequence the presiding officer establishes by appropriate order. The presiding officer also may, on his or her initiative, submit written questions to the parties to be answered in writing, under oath or affirmation, and supported by appropriate documentary data, informational material, or other written evidence.

(b) In a hearing initiated under § 2.1205(b), the initial written presentation of the applicant that is issued a notice of proposed denial or a notice of denial must describe in detail any deficiency or omission in the agency's denial or proposed denial of its application and what relief is sought with respect to each deficiency or omission.

(c) In a hearing initiated under § 2.1205(c), the initial written presentation of a party that requested a hearing or petitioned for leave to intervene must describe in detail any deficiency or omission in the license application, with references to any particular section or portion of the application considered deficient, give a detailed statement of reasons why any particular section or portion is deficient or why an omission is material, and describe in detail what relief is sought with respect to each deficiency or omission.

(d) A party or § 2.1211(b) participant making an initial written presentation under this section shall submit with its presentation or identify by reference to a generally available publication or source, such as the hearing file, all documentary data, informational material, or other written evidence upon which it relies to support or illustrate each omission or deficiency complained of. Thereafter, additional documentary data, informational material, or other written evidence may be submitted or referenced by any party, other than the NRC staff, or by any § 2.1211(b) participant in a written presentation or in response to a written question only as the presiding officer, in his or her discretion, permits.

(e) Strict rules of evidence do not apply to written submissions under this section, but the presiding officer may, on motion or on the presiding officer's own initiative, strike any portion of a written presentation or a response to a written question that is cumulative, irrelevant, immaterial, or unreliable.

§ 2.1235 Oral presentations; oral questions.

(a) Upon a determination that it is necessary to create an adequate record for decision, in his or her discretion the presiding officer may allow or require oral presentations by any party or § 2.1211(b) participant, including testimony by witnesses. Oral presentations are subject to any appropriate time limits the presiding officer imposes. Responsibility for the conduct of the examination of any witness rests with the presiding officer who may allow a party or § 2.1211(b) participant to propose questions for the presiding officer to pose to a witness.

(b) Oral presentations and responses to oral questioning to be relied upon as oral evidence must be given under oath or affirmation. All oral presentations or oral questioning must be stenographically reported and, except as requested pursuant to section 181 of the Act, must be public unless otherwise ordered by the Commission.

(c) Strict rules of evidence do not apply to oral submissions under this section, but the presiding officer may on motion or on the presiding officer's own initiative, strike any portion of the oral presentation or a response to oral questioning that is cumulative, irrelevant, immaterial, or unreliable.

[54 FR 8279, Feb. 28, 1989; 54 FR 53035, Dec. 26, 1989]

§ 2.1237 Motions; burden of proof.

(a) Motions presented in the proceeding must be presented and disposed of in accordance with §§ 2.730 (a)-(g).

(b) Unless otherwise ordered by the presiding officer, the applicant or the proponent of an order has the burden of proof.

§ 2.1239 Consideration of Commission rules and regulations in informal adjudications.

(a) Except as provided in paragraph (b) of this section, any regulation of the Commission issued in its program for the licensing and regulation of production and utilization facilities, source material, special nuclear material, or byproduct material may not be challenged in any adjudication subject to this subpart.

(b) A party to an adjudication subject to this subpart may petition that the application of a Commission regulation specified in paragraph (a) of this section be waived or an exception made for the particular proceeding. The sole ground for a request for waiver or exception must be that special circumstances exist so that application of the regulation to the subject matter of the proceeding would not serve the purposes for which the regulation was adopted. In the absence of a prima facie showing of special circumstances, the presiding officer may not further consider the matter. If the presiding officer determines that a prima facie showing has been made he or she shall certify directly to the Commission itself for determination the matter of whether special circumstances support a waiver or an exception and whether a waiver or an exception should be granted. The Commission's determination shall be made after any further proceeding the Commission deems appropriate.

§ 2.1241 Settlement of proceedings.

The fair and reasonable settlement of proceedings subject to this subpart is encouraged. A settlement must be approved by the presiding officer or Atomic Safety and Licensing Appeal Board, as appropriate, in order to be binding in the proceeding.

INITIAL DECISION, COMMISSION REVIEW, AND FINAL DECISION

§ 2.1251 Initial decision and its effect.

(a) Unless the Commission directs that the record be certified to it in accordance with paragraph (b) of this section, the presiding officer shall render an initial decision after completion of an informal hearing under this subpart. That initial decision constitutes the final action of the Commission thirty (30) days after the date of issuance, unless an appeal is taken in accordance with § 2.1253.

(b) The Commission may direct that the presiding officer certify the record to it without an initial decision and may omit an initial decision and prepare a final decision upon a finding that due and timely execution of its functions so requires.

(c) An initial decision must be in writing and must be based only upon information in the record or facts officially noticed. The record must include all information submitted in the proceeding with respect to which all parties have been given reasonable prior notice and an opportunity to comment. The initial decision must include—

(1) Findings, conclusions, and rulings, with the reasons or basis for them, on all material issues of fact, law, or discretion presented on the record;

(2) The appropriate ruling, order, or denial of relief with its effective date; and

(3) The time within which appeals to the decision and a brief in support of those appeals may be filed, the time within which briefs in support of or in opposition to appeals filed by another party may be filed, and the date when the decision becomes final in the absence of an appeal.

(d) Matters not put into controversy by the parties may not be examined and decided by the presiding officer or the Atomic Safety and Licensing Appeal Board. If the presiding officer or the Appeal Board believes that a serious safety, environmental, or common defense and security matter exists that has not been placed in controversy, the presiding officer or the Appeal Board shall advise the Commission promptly of the basis for that view, and the Commission may take appropriate action.

(e) Pending review and final decision by the Commission, an initial decision resolving all issues before the presiding officer in favor of authorizing licensing action subject to this subpart is immediately effective upon issuance except—

(1) As provided in any order issued in accordance with § 2.1263 that stays the effectiveness of an initial decision; or

(2) As otherwise provided by the Commission in special circumstances.

(f) Following an initial decision resolving all issues in favor of the licensing action as specified in paragraph (e) of the section, the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, notwithstanding the filing or pendency of an appeal pursuant to § 2.1253, shall take the appropriate licensing action upon making the appropriate licensing findings promptly, except as may be provided pursuant to paragraph (e)(1) or (2) of this section.

[54 FR 8280, Feb. 28, 1989; 54 FR 53035, Dec. 26, 1989]

§ 2.1253 Appeals from initial decisions.

Parties and § 2.1211(b) participants may appeal from an initial decision under this subpart in accordance with the procedures set out in §§ 2.762 and 2.763.

§ 2.1255 Review by the Atomic Safety and Licensing Appeal Board.

The Commission authorizes the Atomic Safety and Licensing Appeal Board to exercise the authority and carry out the review functions to be performed under §§ 2.1205(n), 2.1209(d), and 2.1253.

NOTE: Pending completion of the Commission's ongoing rulemaking proceeding for establishing procedures for direct Commission review of initial decisions, i.e., until the effective date of a final rule, the authorization of Atomic Safety and Licensing Appeal Boards to exercise the authority and perform the review functions which would otherwise be exercised and performed by the Commission is restricted as set forth in paragraphs (a) and (b) of this note, notwithstanding any provisions of this regulation to the contrary.

(a) Appeal boards are authorized to decide all appeals and other appellate and related matters (including appeals from initial decisions, interlocutory appeals and motions, certified questions, referrals and petitions for directed certification) pending before an appeal board on October 24, 1990.

(b) Appeal boards are not authorized to decide appeals and other appellate and related matters filed in the period beginning October 25, 1990, and ending on the effective date of a final rule in the rulemaking proceeding referred to above *unless* a filing is closely related to a matter currently pending before an appeal board. Appeals and other appellate and related matters filed in this period will be decided by the Commission under current regulations. Appeal boards should decide in the first instance whether papers filed with it should be referred to the Commission under the terms of this Note.

[54 FR 8276, Feb. 28, 1989, as amended at 55 FR 42945, Oct. 24, 1990]

§ 2.1257 Review of decision and actions of an Atomic Safety and Licensing Appeal Board.

The Commission will not entertain any petition for review of a decision or action of an Atomic Safety and Licensing Appeal Board under this subpart. Commission review is available only on the Commission's own motion within forty (40) days after the date of a decision or action by the Appeal Board under § 2.1255. Commission review will be conducted in accordance with those procedures the Commission deems appropriate. Absent Commission review, the decision of the Appeal Board constitutes the final action of the Commission.

§ 2.1259 Final decision; petition for reconsideration.

(a) Commission or Atomic Safety and Licensing Appeal Board action to render a final decision must be in accordance with § 2.770.

(b) The provisions of § 2.771 govern the filing of petitions for reconsideration.

§ 2.1261 Authority of the Secretary to rule on procedural matters.

The Secretary or the Assistant Secretary may rule on procedural matters relating to proceedings conducted by the Commission itself under this subpart to the same extent they can do so under § 2.772 for proceedings under Subpart G.

§ 2.1263 Stays of NRC staff licensing actions or of decisions of a presiding officer, an Atomic Safety and Licensing Appeal Board, or the Commission pending hearing or review.

Applications for a stay of any decision or action of the Commission, a presiding officer, or an Atomic Safety and Licensing Appeal Board or any action by the NRC staff in issuing a license in accordance with § 2.1205(l) are governed by § 2.788, except that any request for a stay of staff licensing action pending completion of an adjudication under this subpart must be filed at the time a request for a hearing or petition to intervene is filed or within ten (10) days of the staff's action, whichever is later. A request for a stay of a staff licensing action must be filed with the adjudicatory decisionmaker before which the licensing proceeding is pending.

APPENDIX A—STATEMENT OF GENERAL POLICY AND PROCEDURE: CONDUCT OF PROCEEDINGS FOR THE ISSUANCE OF CONSTRUCTION PERMITS AND OPERATING LICENSES FOR PRODUCTION AND UTILIZATION FACILITIES FOR WHICH A HEARING IS REQUIRED UNDER SECTION 189A OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED*

The following statement of general policy and procedure explains in detail the procedures which the Nuclear Regulatory Commission expects to be followed by atomic safety and licensing boards in the conduct of proceedings relating to the issuance of construction permits for nuclear power and test reactors and other production or utilization facilities for which a hearing is mandatory under section 189a of the Atomic Energy Act of 1954, as amended (the Act) and the Energy Reorganization Act of 1974.[1] The provisions are also applicable to proceedings for the issuance of operating licenses for such facilities, except as the context would otherwise indicate, or except as indicated in section VIII. Section VIII sets out the procedures specifically applicable to operating license proceedings. The Statement reflects the Commission's intent that such proceedings be conducted expeditiously and its concern that its procedures maintain sufficient flexibility to accommodate that objective. This position is founded upon the recognition that fairness to all the parties in such cases and the obligation of administrative agencies to conduct their functions with efficiency and economy, require that Commission adjudications be conducted without unnecessary delays. These factors take on added importance in nuclear power reactor licensing proceedings where the growing national need for electric power and the companion need for protecting the quality of the environment call for decision making which is both sound and timely. The Commission expects that its responsibilities under the Atomic Energy Act of 1954, the National Environmental Policy Act of 1969 and other applicable statutes, as set out in the statement which follows, will be carried out in a manner consistent with this position in the overall public interest.

Atomic safety and licensing boards are appointed from time to time by the Commission or the Chairman of the Atomic Safety and Licensing Board Panel to conduct hearings in licensing cases under the authority of section 191 of the Act. Section 191 authorizes the Commission to establish one or more atomic safety and licensing boards to conduct public hearings and to make intermediate or final decisions in administrative proceedings relating to granting, suspending, revoking or amending licenses issued by the Commission. It requires that each board consist of one member who is qualified in the conduct of administrative proceedings and two members who have such technical or other qualifications as the Commission deems appropriate to the issues to be decided. Members of each board may be appointed by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel from a panel selected from private life, the staff of the Commission or other Federal agencies.

An Atomic Safety and Licensing Board may at its discretion appoint special assistants to the Board from the membership of the Atomic Safety and Licensing Board Panel established by the Commission. These special assistants are to be employed to facilitate the hearing process and improve the quality of the record produced for review. The special assistants may serve as technical interrogators in their individual fields of expertise, alternate Atomic Safety and Licensing Board members to sit with the Board and participate in the evidentiary sessions on the issue for which the alternate members were designated, Special Masters to hear evidentiary presentations by the parties on specific technical matters upon the consent of all parties, or informal consultants to brief the board prior to the hearing on the general technical background of subjects involving complex issues. The term "alternate board member" as a "special assistant" within the meaning of 10 CFR 2.722(a)(3) should not be confused with the use of the term "alternate" in 10 CFR 2.721(b). In the latter situation the "alternate" is a substitute for a member of a Board who becomes unavailable. As a special assistant, the "alternate" sits with the three-member Board and not instead of the Board or any of its members.

I. PRELIMINARY MATTERS

(a) A public hearing is announced by the issuance of a notice of hearing, published in the FEDERAL REGISTER as soon as practicable after the application has been docketed, signed by the Secretary of the Commission stating the nature of the hearing and the issues to be considered. The time and place of the first prehearing conference pursuant to § 2.751a will ordinarily be stated in the notice of hearing. Unless the initial notice of hearing states the time and place of the hearing, and the Chairman and other members of the Atomic Safety and Licensing Board that will conduct the hearing, those matters will be the subject of further notice in the FEDERAL REGISTER after publication of the initial notice of hearing. It is the Commission's policy and practice to begin the evidentiary hearing in the vicinity of the site of the proposed facility. The notice of hearing also states the procedures whereby persons may seek to intervene or make a limited appearance and explains the differences between those forms of participation in the proceeding, and states the times and places of the availability, in an appropriate office near the site of the proposed facility, of the notice of hearing, an updated copy of the application, the report of the Advisory Committee on Reactor Safeguards (ACRS), the staff safety evaluation, the applicant's environmental report, the Commission's environmental impact statement, the proposed construction permit or operating license and the transcripts of the prehearing conference and the hearing.

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*In the event of any conflict between the provisions of this appendix and any section of this part, the section governs.

[1] Except as the context may otherwise indicate, this statement is also generally applicable to licensing proceedings of the type described in the statement which may be conducted by a hearing examiner as the presiding officer.

(b) In fixing the time and place of any conference, including prehearing conferences, or of any adjourned session of the evidentiary hearing, due regard shall be had for the convenience and necessity of the parties, petitioners for leave to intervene, or the representatives of such persons, as well as of the Board members, the nature of such conference or adjourned session, and the public interest. Adjourned sessions of hearings may be held in the Washington, D.C. area if all parties so stipulate. If the parties disagree, and any party considers that there are valid reasons for holding such session in the Washington, D.C. area, the matter should be referred to the Atomic Safety and Licensing Appeal Board for resolution.

(c)(1) The Commission or the Atomic Safety and Licensing Board may, consider on their own initiative, or a party may request the Commission or the board to consider, a particular issue or issues separately from, and prior to, other issues relating to the effect of the construction and/or operation of the facility upon the public health and safety, the common defense and security, and the environment or in regard to antitrust considerations. If the Commission or the Board determines that a separate hearing should be held, the notice of hearing or other appropriate notice will state the time and place of the separate hearing on such issue or issues. The board designated to conduct the hearing will issue an initial decision, if deemed appropriate, which will be dispositive of the issue(s) considered at the hearing, in the absence of an appeal or Commission or Appeal Board review pursuant to §§ 2.760 and 2.762, before the hearing on, and consideration of, the remaining issues in the proceeding.

(2) In a proceeding relating to the issuance of a construction permit for a facility which is subject to the environmental impact statement requirements of section 102(2)(C) of the National Environmental Policy Act of 1969 and Subpart A of Part 51 of this chapter and which is a utilization facility for industrial or commercial purposes or is a testing facility, separate hearings may be held and decisions may be issued on National Environmental Policy Act and site suitability issues and other specified issues as provided by Subpart F and § 2.761a.

(d) Prior to a hearing, board members should review and become familiar with: The record of any relevant prior proceedings in the case, including initial decisions and Commission orders, the application, the ARCS report, the staff safety evaluation, the applicant's environmental report, the Commission's environmental impact statement, all other papers filed in the proceeding, the Commission's rules of practice, and other regulations or published statements of policy of the Commission as may be pertinent to the proceeding.

(e) At any time when a board is in existence but is not actually in session, the chairman has all the powers of the board to take action on procedural matters. The chairman may have occasion, when the board is not in session, to dispose of preliminary procedural requests including, among other things, motions by parties relating to the conduct of the hearing. He may wish to discuss such requests with the other members of the board before ruling on them. No interlocutory appeal[2] may be taken by a party as a matter of right from a ruling of the chairman or the board. The board should refer the challenged ruling to the Commission for a final decision if, in its judgment, a prompt decision is necessary to prevent detriment to the public interest or unusual delay or expense. This authority should be exercised sparingly, and only when deemed essential in fairness to the parties or the public.

II. PREHEARING CONFERENCES

(a) A special prehearing conference will be held, within ninety (90) days after the notice of hearing has been published, or such other time as the Commission or the Board may deem appropriate, in addition to the standard prehearing conference provided by § 2.752. The special prehearing conference, authorized by § 2.751a, should be used to permit identification of key issues; take steps necessary for further identification of the issues; consider all intervention petitions to allow preliminary or final determination as to the parties; and establish a schedule for further actions in the proceeding.

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[2] An interlocutory appeal means an appeal to the Commission from a ruling made by the board during the time between the issuance of a notice of hearing and the issuance of the initial decision.

(b) Within sixty (60) days after discovery has been completed,[3] or such other time as the presiding officer or the Commission deems appropriate, a second prehearing conference—the prehearing conference provided by § 2.752—is held to consider simplification, clarification, and specification of the issues; consider amendments to the pleadings; obtain stipulations and admissions of facts and of the contents and authenticity of documents to avoid unnecessary proof; identification of witnesses; the setting of a hearing schedule; and such other matters as may aid in the orderly disposition of the hearing.

(c) A transcript of each prehearing conference will be prepared. The board will issue an order after the conclusion of the special prehearing conference which recites the action taken at the conference and agreements by the parties, identifies the key issues in controversy, makes a preliminary or final determination as to the parties, and provides for submission of status reports on discovery by the parties. The board will also issue an order after the conclusion of the second prehearing conference that specifies the issues in controversy in the proceeding. Each order shall be served upon all parties to the proceeding. Objections to such order may be filed by a party within five (5) days, or, in the case of the staff, within ten (10) days. The board may revise the order in the light of the objections presented and, as permitted by § 2.718(i), may certify for determination to the Commission or the Appeal Board, as appropriate, such matters raised in the objections as it deems appropriate. As specified in § 2.752, the order shall control the subsequent course of the proceeding unless modified for good cause.

(d) Prehearing conferences are open to the public except under exceptional circumstances involving such matters as classified information and certain privileged information not normally a part of the hearing record.

(e) The applicant, the staff and other parties are required to provide each other and the board with copies of prepared testimony in advance of its being offered at the hearing. A schedule may be established at the second prehearing conference for exchange of prepared testimony. Prepared testimony is filed in the Commission's public document room and is available for public inspection. When the staff has reached its conclusions with respect to the application and prepared a safety evaluation, the safety evaluation will be made available—a point of time which may or may not be prior to the hearing.

III. Intervention and Limited Appearances

(a)(1) As required by § 2.714, a person who wishes to intervene must set forth, in a petition for leave to intervene, his interest in the proceeding and how the interest may be affected by Commission action. Petitions for leave to intervene shall, as a basis for enabling the board or the Commission to determine how the petitioner's interest may be affected by the proceeding, set forth (i) the nature of his right under the Act to be made a party to the proceeding, (ii) the nature and extent of the interest that may be affected by the proceeding, and (iii) the effect of any order which may be entered in the proceeding on the petitioner's interest. The petition must identify the specific aspects as to which the petitioner wishes to intervene and set forth with particularity the facts pertaining to his interest. The petitioner must file a supplement to his petition containing his contention(s) and basis therefor not later than fifteen (15) days prior to the holding of the special prehearing conference pursuant to § 2.751a. After consideration of any answers to the petition, the board will rule on the petition. If the board finds that the petitioner's interest is limited to one or more of the issues in the proceeding, the intervenor's participation will be limited to those issues.

Petitions and supplements thereto which set forth contentions relating only to matters outside the jurisdiction of the Commission will be denied. In any event, the granting of a petition for leave to intervene does not operate to enlarge the issues, or become a basis for receipt of evidence, with respect to matters beyond the jurisdiction of the Commission.

(2) Petitions for leave to intervene which are not filed within the time specified in the notice of hearing will not be granted unless the board determines that the petition should be granted based upon paragraph (a)(1) of this section and upon a balancing of (i) good cause, if any, for petitioner's failure to file on time, (ii) the availability of other means whereby the petitioner's interest will be protected, (iii) the extent to which petitioner's participation may reasonably be expected to assist in developing a sound record, (iv) the extent to which peti-

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[3] "Discovery", for this purpose, does not include production of the ACRS report, the staff's safety evaluation, or the detailed statement on environmental considerations prepared by the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, or his designee.

tioner's interest will be represented by existing parties, and (v) the extent which the petitioner's participation will broaden the issues or delay the proceedings.

(3) Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have all the rights of the applicant to participate fully in the conduct of the hearing, such as the examination and cross-examination of witnesses, with respect to their contentions related to the matters at issue in the proceeding.

(4) If more than one person who has been granted leave to intervene has substantially the same kind of interest that may be affected by the proceeding, and raises the same basic questions, the board or the Commission may order those persons to consolidate their presentation of evidence, cross-examination, briefs, proposed findings of fact and conclusions of law and argument, unless such consolidation cannot be accomplished without prejudice to the rights of a party.

(b) A person who does not wish to, or is not qualified to become a party may be permitted at the discretion of the board, to make a limited appearance pursuant to § 2.715. Persons permitted to make limited appearances do not become parties, but should be permitted to make statements at such stage of the proceeding as the board may consider appropriate. A person making a limited appearance may only make an oral or written statement on the record, and may not participate in the proceeding in any other way. The board may wish to limit the length of oral statements. A member of the public does not have the right to participate unless he has been granted the right to intervene as a party or the right of limited appearance for the purpose of making a statement.

IV. DISCOVERY

(a) Once the key issues in controversy are identified in the special prehearing conference order (§ 2.751a.(d)), discovery may proceed and will be limited to those matters. In no event should the parties be permitted to use discovery procedures to conduct a "fishing expedition" or to delay the proceeding.

(b) Under the Commission's rules of practice, discovery permitted by §§ 2.720, 2.740, 2.740a, 2.740b, 2.741, 2.742, and 2.744 must be completed by the second prehearing conference, except upon leave for good case shown.

(c) Depositions, interrogatories and document production between parties other than the staff are obtainable on notice or request to the other party and without leave of the Commission or the board, in line with the Federal Rules of Civil Procedure.

(d) In general, staff documents that are relevant to a proceeding will be publicly available as a matter of course unless there is a compelling justification for their nondisclosure. Therefore, document discovery directed at the staff will be restricted, as provided in § 2.744, since most staff documents will be publicly available and should reasonably disclose the basis for the staff's position. Formal discovery of documents against the staff will be limited to cases where it concerns a matter necessary to a proper decision in a case and the information sought is not obtainable elsewhere. Discovery as a legitimate means of obtaining information will not be inhibited, but in view of the comprehensive body of information routinely available without request, there should be minimum need to resort to time consuming discovery procedures. Discovery against the staff (and other NRC personnel, including consultants) by way of deposition is permitted upon a showing of exceptional circumstances. Interrogatories may be addressed to the staff where the information is necessary to proper decision in the case and not obtainable elsewhere.

V. THE HEARING

The board should use its powers under §§ 2.718 and 2.757 to assure that the hearing is focused upon the matters in controversy among the parties and that the hearing process for the resolution of controverted matters is conducted as expeditiously as possible, consistent with the development of an adequate decisional record.

The following procedures should be observed in the conduct of public hearings:

(a) Preliminary:

(1) A verbatim transcript will be made of the hearing.

(2) The Chairman should convene the hearing by stating the title of the proceeding and describing its nature.

(3) He should state the date, time, and place at which the prehearing conferences were held, and identify the persons participating in them. He should summarize the second prehearing conference order.

(4) He should explain the procedures for the conduct of the hearing. He should request that counsel for the parties identify themselves on the record, and provide them with the opportunity to make opening statements of their respective positions.

(5) He should describe, for the benefit of members of the public who may be present, the respective roles of the board, the ACRS and the staff, and the Commission procedures for review of the decision. He should also describe the continuing review and inspection surveillance conducted by the Commission after a construction permit or an operating license has been issued.

(b)(1) The Chairman should call attention to the provisions of § 2.715 for participation by limited appearance. He should briefly explain these provisions and the rights of persons who are permitted to make limited appearances.

(2) The Chairman should inquire of those in attendance whether there are any who wish to participate in the hearing by limited appearance.

(3) Should any person seek leave to intervene when the hearing has been convened, he must set forth, with particularity in a written petition, the reasons why it was not possible to file a petition within the time prescribed in the notice of hearing, as described in section III, to afford a basis for the board to determine whether or not good cause has been shown for the untimely filing. In granting a petition for leave to intervene which is not timely filed, the board will impose such conditions as are appropriate to minimize any delay in the proceeding.

(4) A person making a limited appearance may want not only to state his position, but to raise questions which he would like to have answered. This should be permitted to the extent the questions are within the scope of the proceeding as defined by the issues set out in the notice of hearing, the prehearing conference order, and any later orders. Usually such persons should be asked to make their statements and raise their questions early in the proceeding so that the board will have an opportunity to be sure that relevant and meritorious questions are properly dealt with during the course of the hearing.

(5) It is the Commission's view that the rules governing intervention and limited appearances are necessary in the interest of orderly proceedings. The Commission also believes that through these two methods of public participation all members of the public are assured of the right to participate by a method appropriate to their interest in the matter. This should be fully explained at the beginning of the hearing. In some cases the board may feel that it must deny an application to intervene but that it can still accommodate the desire of the person involved by allowing him to make a statement and raise questions under the limited appearance rule.

(6) Boards have considerable discretion as to the manner in which they accommodate their conduct of the hearing to local public interest and the desires of local citizens to be heard. Particularly in cases where it is evident that there is local concern as to the safety of the proposed plant, boards should so conduct the hearing as to give appropriate opportunity for local citizens to express their views, while at the same time protecting the legal interests of all parties and the public interest in an orderly and efficient licensing process.

(7) In some cases, argument and further hearing can add nothing to the filings of the parties. In those cases the board is authorized, pursuant to § 2.749, on motion, to render a decision, if the filings in the proceeding and other materials show that there is no genuine issue as to any material fact. However, in proceedings involving construction permits, this procedure may be used only for determining subordinate issues and not the ultimate issue as to whether the construction permit should be issued.

(c) Opening statements:

(1) It is anticipated that the applicant, who has the burden of proof, will, at an appropriate time early in the proceeding, make an oral statement describing in terms that will be readily understood by the public, the principal safety and environmental considerations involved in carrying out the activity sought to be authorized.

(2) Other parties to the proceeding may also make an oral opening statement describing their position on the proposed licensing action.

(d) Evidence:

(1) Pursuant to § 2.732, the applicant has the burden of proof.

(2) The parties are required to submit direct testimony in written form and serve copies of such prepared written testimony on all parties pursuant to the schedule established at the second prehearing conference—in any event, at least 15 days in advance of the session of the hearing at which such testimony is to be presented, as provided by § 2.743(b), unless the board orders otherwise on the basis of objections presented. The staff's position is reflected primarily in the safety evaluation and final environmental impact statement. Consequently, the staff will not present its case until these documents are available. The use of such advance written testimony is expected to expedite the hearing process.

(3) The testimony of all witnesses will be given under oath. These witnesses may be collectively sworn at the opening of the hearing or if additional witnesses are called upon to testify at a subsequent stage they may be sworn at the time of their appearance. There is ordinarily no need for oral recital of prepared testimony unless the Board considers that some useful purpose will be served.

(4) The proceedings should be conducted as expeditiously as practicable, without impairing the development of a clear and adequate record. The order of presenting testimony may be freely varied in the conduct of the hearing. The Board may find it helpful to take expert testimony from witnesses on a roundtable basis after the receipt in evidence of prepared testimony.

(5) To prevent unnecessary delays and an unnecessarily large record, the Board may, pursuant to § 2.757, limit cumulative testimony, strike argumentative, repetitious, cumulative, or irrelevant evidence, take other

necessary and proper steps to prevent argumentative, repetitious or cumulative cross examination, and impose appropriate time limitations on arguments.

(6) Documentary evidence may be offered in evidence as provided in § 2.743. Such evidence offered during the course of the hearing should be described by counsel, and furnished to the reporter for marking. Documents offered for marking should be numbered in order of receipt. On identification of a document, it may be offered in evidence.

(7) Objections may be made by counsel to any questions or any line of questioning, and to the admission of any document and should be ruled upon by the board. The board may admit the evidence, may sustain the objection, or may receive the evidence, reserving for later determination the question of admissibility. In passing on objections, the board, while not bound to view proferred evidence according to its admissibility under strict application of the rules of evidence in judicial proceedings, should exclude evidence that is irrelevant to issues in the case as defined in the notice of hearing or the prehearing conference order, or that pertains to matters outside the jurisdiction of the board or the Nuclear Regulatory Commission. Irrelevant material in prepared testimony submitted in advance under § 2.743(b) may be subject to a motion to strike under the procedures provided in § 2.730.

(8) Use of scientifically or technically trained persons who are not attorneys to conduct direct or cross-examination on behalf of a party is provided for in § 2.733. This procedure is a privilege, not a right, and may be granted to further the conduct of the hearing. Before permitting such a person to conduct examination of witnesses, the board must determine (i) that he has technical or scientific qualifications, (ii) that he has read the written testimony and any documents which are to be the subject of his examination, and (iii) that he has prepared himself to conduct a meaningful and expeditious examination. Permission to conduct examination will be limited to the areas in which the interrogator is shown to be qualified. The party on whose behalf the interrogator conducts the examination and his attorney are responsible for the interrogator's conduct of examination or cross-examination.

(9) The extent to which challenges to NRC regulations can be made in a licensing proceeding is limited. A party may petition for waiver of or exception to the application of a specified NRC rule or regulation to an aspect of the subject matter of the proceeding. The party must file a petition and an affidavit that identifies the specific aspect of the subject matter of the proceeding as to which application of the rule or regulation would not serve the purpose for whic
the regulation was adopted and that se
forth with particularity the special circu
stances alleged to justify a waiver or exce
tion on that ground (§ 2.758). Upon a fin
ing by the board, based on the petition a
affidavits and any material submitted
other parties, that the party has not made
prima facie case, no evidence, discovery,
argument will be allowed on the matter.
the Board finds that such a showing h
been made, it will certify the matter, wi
out ruling, directly to the Commission fo
determination as to whether the applicati
of the regulation to a particular aspect
the subject matter of the proceeding sho
be waived or an exception made.

(10) The Commission has recognized t
public interest in achieving fair and reaso
able settlement of contested proceedi
(§ 2.759). Therefore, to the extent not inc
sistent with the Act, fair and reasonable s
tlements are encouraged, either as to p
ticular issues in a proceeding or the ent
proceeding.

(11) Unless testimony is being taken o
roundtable basis or there is some occasi
for clarification of testimony as render
the board may wish to reserve its questi
until the parties have completed questi
ing of the witnesses, since counsel for t
respective parties will generally be prepa
to develop the various lines of pertine
questions.

(12) Conferences for the clarification
matters between the board and the parti
or the formulation of more meaning
questions, may be used to expedite the he
ing and simplify the record. Informal c
ferences, including telephone conferenc
should be encouraged to this end.

(13) The board should ordinarily not
journ the hearing once it has begun, exc
as the hearing may be divided into segme
to permit consideration of discrete are
such as (i) radiological health and safety
(ii) environmental impact. To the ext
practicable, legal questions should be
solved prior to the hearing. If the board
lieves that additional information is
quired in the presentation of the case,
would be expected to request the applic
or other party to supplement the presen
tion. If a recess should prove necessary
obtain such additional evidence, the rec
should ordinarily be postponed until av
able evidence has been received.

(14 Many of the time limitations p
scribed in Part 2 were set to allow the m
mum time for the parties to the proceedi
to perform various activities. Where the
tivities covered by the limitations can
performed in less time, the time limits m
be reduced by order of the board, if app
priate, where such action would not pre
dice a party. Similarly, in any case in wh

a time limit is not set by Part 2, the board should impose reasonable time limits.

(e) Record:

(1) The transcript of testimony and the exhibits, together with all of the papers and requests filed in a proceeding, constitute the record for decision, except to the extent that official notice is taken.

(2) Generally speaking, a decision by a board must be made on the basis of evidence which is in the record of the proceeding. A board, however, is expected to use its expert knowledge and experience in evaluating and drawing conclusions from the evidence that is in the record. The board may also take account of and rely on certain facts which do not have to be "proved" since they are "officially noticed"; these facts do not have to be "proved" since they are matters of common knowledge. Pursuant to § 2.743(i) "official notice" may be taken of any fact of which judicial notice might be taken by the courts of the United States and of any technical or scientific fact within the knowledge of the Commission as an expert body. Each fact officially noticed must be specified in the record with sufficient particularity to advise the parties of the matters which have been noticed or brought to the attention of the parties before the final decision, and each party adversely affected by the decision must be afforded an opportunity to controvert the noticed fact. (For example, a board might take "official notice" of the fact that high level wastes are encountered mainly as liquid residue from fuel reprocessing plants.) Matters which are "officially noticed" by a board furnish the same basis for findings of fact as matters which have been placed in evidence and proved in the usual sense.

(f) Participation by board members:

(1) In contested proceedings, the board will determine controverted matters as well as decide whether the findings required by the Act and the Commission's regulations should be made and whether, in accordance with Subpart A of Part 51, the construction permit should be issued as proposed. Thus, in such proceedings, the board will determine the matters in controversy and may be called upon to make technical judgments of its own on those matters. As to matters pertaining to radiological health and safety which are not in controversy, boards are neither required nor expected to duplicate the review already performed by the staff and ACRS, and they are authorized to rely upon the testimony of the staff, the applicant, and the conclusions of the ACRS, which are not controverted by any party.

(2) In an uncontested case, boards are neither required nor expected to duplicate the radiological safety review already performed by the staff and the ACRS and they are authorized to rely upon the testimony of the staff and the applicant, and the conclusions of the ACRS. The role of the board is not to conduct a de novo evaluation of the application, but rather to decide whether the application and the record of the proceeding contain sufficient information, and the review of the application by the Commission's staff, including the environmental review pursuant to the National Environmental Policy Act of 1969, has been adequate, to support the findings proposed to be made by the Director of Regulation and the issuance of the construction permit proposed by the Director of Regulation. In doing so, the board is expected to be mindful of the fact that it is the applicant, not the staff, who is the proponent of the construction permit and who has the burden of proof.

(3) Whether the construction permit proceeding is contested or uncontested, the board will, as to environmental impact matters, (a) determine whether the requirements of section 102(2) (A), (C) and (E) of the National Environmental Policy Act of 1969 and Subpart A of Part 51 of this chapter have been complied with; (b) independently consider the final balance among conflicting factors contained in the record, with a view to determining the appropriate action to be taken; and (c) determine whether the construction permit should be granted, denied, or appropriately conditioned to protect environmental values.

(4) A question may be certified to the Commission or the Appeal Board, as appropriate, for determination when a major or novel question of policy, law or procedure is involved which cannot be resolved except by the Commission or the Appeal Board and when the prompt and final decision of the question is important for the protection of the public interest or to avoid undue delay or serious prejudice to the interests of a party. For example, a board may find it appropriate to certify novel questions as to the regulatory jurisdiction of the Commission or the right of persons to intervene.

(g) Close of hearing:

(1) If, at the close of the hearing, the board should have uncertainties with respect to the matters in controversy because of a need for a clearer understanding of the evidence which has already been presented, it is expected that the board would normally invite further argument from the parties—oral or written or both—before issuing its initial decision. If the uncertainties arise from lack of sufficient information in the record, it is expected that the board would normally require further evidence to be submitted in writing with opportunity for the other parties to reply or reopen the hearing for the taking of further evidence, as appropriate. If either of such courses is followed, it is expected that the applicant would normally be afforded the opportunity to make the final submission.

(2) A board should give each party the opportunity to make a brief closing statement.

(3) A schedule should be set by the board and recorded, either in the transcript or by written order, of the dates upon which the parties are directed by the board to file proposed findings of fact and conclusions of law. In uncontested cases, the proposed findings will ordinarily be extremely brief. In contested proceedings, proposed findings of fact and conclusions of law submitted by the parties may be more detailed. While brevity in such submissions is encouraged, the proposed findings and conclusions should be such as to reflect the position of parties submitting them, and the technical and factual basis therefor.

(4) The board should dispose of any additional procedural requests.

(5) The chairman should formally close the hearing.

VI. POSTHEARING PROCEEDINGS, INCLUDING THE INITIAL DECISION

(a) A board, acting through the Chairman, should dispose of procedural requests made after the close of the hearing, including motions of the parties for correction of the transcript. Responses to requests and motions of the parties are made part of the record by issuance of written orders.

(b) On receipt of proposed findings and conclusions from the parties, the board should prepare the initial decision. Under the Administrative Procedure Act and the Commission's regulations, the decision should include:

(1) Findings, conclusions, and rulings, with the reasons or basis for them, on all material issues of fact, law, or discretion presented on the record;

(2) All facts officially noticed and relied on, if any, in making the decision;

(3) The appropriate ruling, order, or denial or relief, with the effective date and time within which a notice of appeal from the initial decision may be filed;

(4) The time when the decision becomes final.

(c) Issues to be decided by the board:

(1) In a contested proceedings for the issuance of a construction permit, the board will determine the following issues:

(i) Whether in accordance with the provisions of, § 50.35(a) of this chapter:

(*a*) The applicant has described the proposed design of the facility, including, but not limited to, the principal architectural and engineering criteria for the design, and has identified the major features or components incorporated therein for the protection of the health and safety of the public;

(*b*) Such further technical or design information as may be required to complete the safety analysis and which can reasonably be left for later consideration, will be supplied in the final safety analysis report;

(*c*) Safety features or components, if any, which requires research and development have been described by the applicant and the applicant has identified, and there will be conducted, a research and development program reasonably designed to resolve any safety questions associated with such features and components; and

(*d*) On the basis of the foregoing, there is reasonable assurance that

(*1*) Such safety questions will be satisfactorily resolved at or before the latest date stated in the application for completion of construction of the proposed facility, and

(*2*) Taking into consideration the site criteria contained in Part 100 of this chapter, the proposed facility can be constructed and operated at the proposed location without undue risk to the health and safety of the public.

(ii) Whether the applicant is technically qualified to design and construct the proposed facility;

(iii) Whether the applicant is financially qualified to design and construct the proposed facility;

(iv) Whether the issuance of a permit for the construction of the facility will be inimical to the common defense and security or to the health and safety of the public;

(v) Whether, with respect to the requirements of section 102(2) (A), (C) and (E) of the National Environmental Policy Act, in accordance with Subpart A of Part 51 of this chapter, the construction permit should be issued as proposed.

(2) In an uncontested proceeding for the issuance of a construction permit, the board will, without conducting a de novo evaluation of the application, determine:

(i) Whether the application and the record of the proceeding contain sufficient information, and the review of the application by the Commission's staff has been adequate, to support the findings proposed to be made and required by the Act for the issuance of the construction permit proposed by the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, and

(ii) Whether the review conducted pursuant to the National Environmental Policy Act of 1969 has been adequate.

(3) Regardless of whether the proceeding is contested or uncontested, the board will, in its initial decision, in accordance with Subpart A of Part 51 of this chapter:

(i) Determine whether the requirements of section 102(2)(A), (C) and (E) of the National Environmental Policy Act and Subpart A of Part 51 of this chapter have been complied with in the proceeding;

(ii) Independently consider the final balance among conflicting factors contained in the record of the proceeding with a view to determining the appropriate action to be taken; and

(iii) Determine whether the construction permit should be issued, denied, or appropriately conditioned to protect environmental values.

(d) It is expected that ordinarily a board will render its initial decision within 35 days after its receipt of proposed findings of fact and conclusions of law filed by the parties in a contested case and within 15 days after receipt of such proposed findings and conclusions in an uncontested case.

(e) The initial decision will be transmitted to the Chief, Docketing and Service Section, Office of the Secretary, for issuance.

(f) After the board's initial decision is issued, the entire record of the hearing, including the board's initial decision, will be sent to the Commission or the Appeal Board, as appropriate, for review. In the course of this review, the Commission may allow the board's decision to become the final decision of the Commission, may modify a board decision, or may send the case back to the board for additional testimony on particular points or for further consideration of particular issues.

VII. GENERAL

(a) Two members, being a majority of the board, constitute a quorum, if one of those members is the member qualified in the conduct of administrative proceedings. The vote of a majority controls in any decision by a board, including rulings during the course of a hearing as well as formal orders and the initial decision. A dissenting member is of course, free to express his dissent and the reasons for it in a separate opinion for the record.

(b) The Commission or the Chairman of the Atomic Safety and Licensing Board Panel may designate a technically qualified alternate or an alternate qualified in the conduct of administrative proceedings, or both, for a board. The designation of an alternate is discretionary. Alternates may be designated where the Commission (or the Chairman of the Atomic Safety and Licensing Board Panel) in its judgment believes that a proceeding involves factors that warrant the continuing assignment and presence of an alternate. If any alternates are designated before the hearing, they will receive copies and become familiar with the application and other documents filed by the parties prior to the start of the hearing. It is expected that an alternate will be constituted or appointed by the Commission or the Chairman of the Atomic Safety and Licensing Board Panel as a member of the board in situations where a technically qualified member of the board, or the member qualified in the conduct of administrative proceedings, becomes unavailable.

(c) Section 2.781 specifies when consultation between Commissioners or boards, on the one hand, and the staff, on the other hand, is permitted in licensing proceedings conducted under Subpart G. Section 2.781 also permits a board, in the same type of proceeding, to consult with members of the panel from which the members of the board are drawn.

VIII. PROCEDURES APPLICABLE TO OPERATING LICENSE PROCEEDINGS

(a) This section sets out certain differences in procedure from those described in sections I-VII above, which are required by the fact that the proceeding is for the issuance of an operating license rather than a construction permit. Otherwise, the provisions of sections I through VII of this statement of general policy also apply to an operating license proceeding, except as the context requires otherwise.

(b) In an operating license proceeding the board will determine the matters in controversy among the parties, and where the board determines that a serious safety, environmental, or common defense and security matter was not raised by the parties, the board will determine such matter as being among the issues to be decided. Those issues will be specified in the notice of a hearing issued by the Commission, or in a prehearing conference order issued by the board in the exercise of its discretion during the hearing.

The issues will be the matters in controversy among the parties or raised by the board within the purview of the following:

(1) Whether there is reasonable assurance that construction of the facility will be substantially completed, on a timely basis, in conformity with the construction permit and the application as amended, the provisions of the Act, and the rules and regulations of the Commission;

(2) Whether the facility will operate in conformity with the application as amended, the provisions of the Act, and the rules and regulations of the Commission;

(3) Whether there is reasonable assurance (i) that the activities to be authorized by the operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

(4) Whether the applicant is technically and financially qualified to engage in the activities to be authorized by the operating license in accordance with the Commission's regulations, except that the issue of financial qualification shall not be considered by the board if the applicant is an electric utility seeking a license to operate a utilization facility of the type described in § 50.21(b) or § 50.22.

(5) Whether the applicable provisions of 10 CFR Part 140 have been satisfied;

(6) Whether issuance of the license will be inimical to the common defense and security or to the health and safety of the public; and

(7) Whether, with respect to the requirements of section 102(2) (A), (C), and (E) of the National Environmental Policy Act, in accordance with Subpart A of Part 51, the operating license should be issued as proposed.

(c) The board, in operating license proceedings, will make findings on the matters in controversy among the parties and any matter not raised by the parties but examined by the board in its discretion in accordance with paragraph (b) of this section and § 2.760a. Depending on the resolution of those matters, the Director of Regulation would issue, deny, or appropriately condition the operating license.

(d) In operating license proceedings, the procedure for summary disposition of the proceeding on the pleadings described in § 2.749 may be used to determine the ultimate issue of whether the operating license should be issued.

IX. LICENSING PROCEEDINGS SUBJECT TO APPELLATE JURISDICTION OF ATOMIC SAFETY AND LICENSING APPEAL BOARD

(a) An Atomic Safety and Licensing Appeal Board, composed of three members assigned from the Atomic Safety and Licensing Appeal Panel, designated by the Commission, reviews initial decisions of presiding officers in (1) proceedings on applications under Part 50 for facility licenses or construction permits and (2) such other licensing proceedings as the Commission specifies. In such proceedings, an Atomic Safety and Licensing Appeal Board performs the functions and exercises the authority of the Commission described in sections I(e), V(f)(4), and VI(f), except as their context may require otherwise. The Atomic Safety and Licensing Appeal Board is required to decide each matter before it in accordance with the rules and regulations, case precedent, and established policies of the Commission. In a proceeding on an application for an operating license, if the Atomic Safety and Licensing Appeal Board determines that a serious safety, environmental, or common defense and security matter has not been raised by the parties, it has the authority to give appropriate consideration to that matter. It has no responsibility or authority for issuing rules or regulations. The Appeal Board for a particular proceeding is composed of three members assigned from the Atomic Safety and Licensing Appeal Panel and possessing qualifications deemed appropriate to the issues to be decided. The Chairman of the Appeal Board for a particular proceeding shall be qualified in the conduct of administrative proceedings.

(b) Two members, being a majority of the Appeal Board, constitute a quorum, if one of those members is the member qualified in the conduct of administrative proceedings. Except as permitted by § 2.787(b), the vote of a majority controls in any decision by the Appeal Board, including orders in interlocutory matters and final decisions. A dissenting member is, of course, free to express his dissent and the reasons for it in a separate opinion for the record.

(c) Consultation between members of the Atomic Safety and Licensing Appeal Board for a particular proceeding and the staff is permitted on the conditions specified in 10 CFR 2.781. However, members of the atomic safety and licensing boards for particular proceedings may not consult on any disputed issue in those proceedings with members of the Appeal Panel.

(d)(1) Appeals to the Appeal Board from initial decisions, or designated portions thereof, are initiated by the filing of a notice of appeal within 10 days of the issuance and service of the initial decision.

(2) A brief in support of the appeal must be filed by the appellant within 30 days thereafter (40 days in the case of the staff).

(3) A responsive brief may be filed by any other party within 30 days (40 days in the case of the staff) after the period has expired for the filing and service of the briefs of all appellants. A responding party shall file a single responsive brief regardless of the number of appellant's briefs filed. The prescribed time limits are subject to being lengthened or shortened in a particular case, either on motion of a party or by the Appeal Board on its own initiative (10 CFR 2.711). The time limits are also subject to the provisions of 10 CFR 2.710 relating to service by mail.

(4) There must be strict compliance with the time limits prescribed for the filing of the notice of appeal and briefs by the rules of practice or by an order of the Appeal Board which extends or shortens those limits in the particular case. Absent a showing of extraordinary and unanticipated circumstances, motions for extensions of time must be received by the Appeal Board at least 1 day prior to the date upon which the document in question is then due for filing. In no circumstances will a document be accepted by the Appeal Board on an untimely basis unless it is accompanied by a motion for leave to file it out of time, which similarly must be founded upon extraordinary and unanticipated circumstances.

(5) Every brief in excess of 10 pages shall contain a table of contents, with page references, and a table of cases (alphabetically arranged), statutes, regulations, and other

authorities cited with references to the pages of the brief where they are cited.

(6) No brief is to exceed 70 pages in length unless leave to file a brief of a specified greater length has been previously sought and granted (10 CFR 2.762(e)). In this connection, inasmuch as the Appeal Board has available to it the entire record of the proceeding, extended quotations in a brief from the record are neither required nor desirable. A summary is preferable, accompanied by explicit references to the record sources.

(7) Notices of appeal and briefs which in form or content are not in substantial compliance with the requirements imposed by the rules of practice are subject to being stricken.

(e) The holding of oral argument, whether or not specifically requested by a party, is within the Appeal Board's discretion (10 CFR 2.763). Where a notice of appeal has been filed, the Appeal Board routinely will consider whether the case should be calendared for oral argument. This consideration normally will take place following the receipt of all briefs. Oral argument will be directed if at least one member of the Appeal Board votes in favor of it. If oral argument is to be held, an order will be issued by the Appeal Board which will set the specific date and location, as well as the time allotted to each of the parties. In some instances, the order may also restrict the scope of the oral argument to one or more specified issues. It is anticipated that oral arguments will be conducted in either Washington, D.C., or Bethesda, Md.

X. PROCEEDINGS FOR THE CONSIDERATION OF ANTITRUST ASPECTS OF FACILITY LICENSE APPLICATIONS

(a) Under the Atomic Energy Act of 1954, as amended, the Commission is required, with respect to applications for construction permits or operating licenses for production and utilization facilities for industrial or commercial purposes licensed under section 103, which include power reactors subject to the mandatory hearing requirements of section 189a of the Act, to follow procedures for antitrust review in section 105c of the Act. This section outlines the procedures used by the Commission to implement that section.

(b)(1) When the antitrust information portion of an application is received and docketed for a facility construction permit under section 103 of the Act which is subject to antitrust review under section 105c, the notice of receipt of the antitrust information published in the FEDERAL REGISTER shall state that persons who wish to have their views on the antitrust aspects of the application considered by the NRC and presented to the Attorney General for consideration shall submit such views to the Commission within sixty (60) days after publication of the notice.

(2) Upon receipt of the antitrust information responsive to Regulatory Guide 9.3 submitted in connection with an application for a facility operating license under section 103 of the Act, the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, shall publish in the FEDERAL REGISTER and in appropriate trade journals a "Notice of Receipt of Operating License Antitrust Information." The notice shall invite persons to submit, within thirty (30) days after publication of the notice, comments or information concerning antitrust aspects of the application to assist the Director in determining, pursuant to section 105c of the Act, whether significant changes in the licensee's activities or proposed activities have occurred since completion of the previous antitrust review in connection with the construction permit application. The notice shall also state that persons who wish to have their views on the antitrust aspects of the application considered by the NRC and presented to the Attorney General for consideration should submit such views within thirty (30) days after publication of the notice to: U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Chief, Antitrust and Economic Analysis Branch.

(3) If the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, after reviewing any comments or information received in response to the published notice and any comments or information regarding the applicant received from the Attorney General, concludes that there have been no significant changes since the completion of the previous antitrust review in connection with the construction permit, a finding of no significant changes shall be published in the FEDERAL REGISTER, together with a notice stating that any request for reevaluation of such finding should be submitted within thirty (30) days of publication of the notice. If no requests for reevaluation are received within that time, the finding shall become the NRC's final determination. Requests for a reevaluation of the no significant changes determination shall be accepted after the date when the Director's finding becomes final but before the issuance of the OL only if they contain new information, such as information about facts or events of antitrust significance that have occurred since that date, or information that could not reasonably have been submitted prior to that date.

(4) If, as a result of the reevaluation of the finding described above, it is determined that there have been no significant changes, the Director of Nuclear Reactor Regulation

or Director of Nuclear Material Safety and Safeguards, as appropriate, shall deny the request and shall publish a notice of finding of no significant changes in the FEDERAL REGISTER. The notice and finding become the final NRC decision thirty (30) days after being made and only in the event that the Commission has not exercised sua sponte review.

(5) If the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, concludes that significant changes have occurred since the completion of the previous antitrust review in connection with the construction permit, then the provisions of § 2.102(d) shall apply.

(c)(1) Except as provided in paragraph (c)(2) below, the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, shall refer and transmit a copy of each application for a construction permit or an operating license for a utilization or production facility under section 103 of the Act, to the Attorney General as required by section 105c of the Act. Under that section, the Attorney General will, within a reasonable time, but in no event to exceed 180 days after receipt, render such advice to the Commission as is determined to be appropriate in regard to the finding to be made by the Commission as to whether the activities under the license would create or maintain a situation inconsistent with the antitrust laws specified in subsection 105a of the Act.

(2) The review by the Attorney General described in paragraph (c)(1) above is not required for applications for operating licenses for production or utilization facilities under section 103 of the Act for which the construction permit was also issued under section 103, unless the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, determines, after consultation with the Attorney General and in accordance with § 2.101(e), that such review is advisable on the ground that significant changes in the licensee's activities or proposed activities have occurred subsequent to the previous review by the Attorney General and by the Commission under section 105c of the Act in connection with the construction permit.

(d) The Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, will publish the Attorney General's advice in the FEDERAL REGISTER promptly upon receipt, and will make such advice a part of the record in any proceeding on antitrust matters conducted in accordance with subsection 105c(5) and section 189a of the Act. The Director of Regulation will also publish in the FEDERAL REGISTER a notice that the Attorney General has not rendered any such advice. The notice published in the FEDERAL REGISTER will also include a notice of hearing, if appropriate, or, if the Attorney General has not recommended a hearing, will state that any person whose interest may be affected by the proceeding may, pursuant to and in accordance with § 2.714, file a petition for leave to intervene and request a hearing on the antitrust aspects of the application. The notice will state that petitions for leave to intervene and requests for hearing shall be filed within 30 days after publication of the notice.

(e) If a hearing on antitrust aspects of the application is requested, or is recommended by the Attorney General, it will generally be held separately from the hearing held on matters of radiological health and safety and common defense and security described in sections I-VIII of this appendix. The notice of hearing will fix a time for the hearing, which will be as soon as practicable after the receipt of the Attorney General's advice and compliance with section 189a of the Act and other provisions of this part. However, as permitted by subsection 105c(8) of the Act, with respect to proceedings in which an application for a construction permit was filed prior to December 19, 1970 and proceedings in which a written request for antitrust review of an application for an operating license to be issued under section 104b has been made by a person who intervened or sought by timely written notice to the Commission to intervene in the construction permit proceeding for the facility to obtain a determination of antitrust consideration or to advance a jurisdictional basis for such determination within 25 days after the date of publication in the FEDERAL REGISTER of notice of filing of the application for an operating license or December 19, 1970, whichever is later, the Commission may issue a construction permit or operating license, provided that the permit or license so issued contains the condition specified in § 50.55b of this chapter.

(f) Hearings on antitrust aspects will be conducted by a presiding officer, either an Administrative Law Judge or an atomic safety and licensing board comprised of three members, one of whom will be qualified in the conduct of administrative proceedings and two of whom will have such technical or other qualifications as the Commission deems appropriate to the issues to be decided.

(g) When the Attorney General has advised that there may be adverse antitrust aspects and recommends that a hearing be held, the Attorney General or his designee may participate as a party in the proceedings.

(h) At the hearing, the presiding officer will give due consideration to the advice received from the Attorney General and to evidence pertaining to antitrust aspects received at the hearing.

(i) The presiding officer will, in the initial decision, make a finding as to whether the activities under the proposed license would create or maintain a situation inconsistent with the antitrust laws as specified in section 105a of the Act. If the presiding officer finds that such a situation would be created or maintained, it will consider, in determining whether the permit or license should be issued or continued, such other factors as it deems necessary to protect the public interest, including the need for power in the affected area. The certainty of contravening the antitrust laws or the policies clearly underlying these laws is not intended to be implicit in this standard; nor is mere possibility of inconsistency. The finding will be based on reasonable probability of contravention of the antitrust laws or the policies clearly underlying these laws. The presiding officer will conclude whether, in its judgment, it is reasonably probable that the activities under the license would, when the license is issued or thereafter, be inconsistent with any of the antitrust laws or the policies clearly underlying these laws.

(j) On the basis of the findings in the proceeding on the antitrust aspect of the application, the presiding officer may (i) authorize the issuance of the permit or license after favorable consideration of matters of radiological health and safety and common defense and security, and matters raised under the National Environmental Policy Act of 1969, at the hearing described in sections I-VIII of this appendix; (ii) authorize the continuation of a permit or license already issued; (iii) direct the denial of the application for the permit or license, or the rescission of a permit or license already issued; or (iv) authorize the issuance of a permit or license subject to appropriate conditions, and subject to favorable consideration of matters of radiological health and safety and common defense matters raised under the National Environmental Policy Act of 1969 at the hearing described in sections I-VIII of this appendix.

[31 FR 12777, Sept. 30, 1966]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting Appendix A, see the List of CFR Sections Affected in the Finding Aids section of this volume.

APPENDIX B—GENERAL STATEMENT OF POLICY AND PROCEDURES CONCERNING PETITIONS PURSUANT TO § 2.802 FOR DISPOSAL OF RADIOACTIVE WASTE STREAMS BELOW REGULATORY CONCERN

I. Introduction and Purpose
II. Standards and Procedures
III. Agreement States
IV. Future Action

I. INTRODUCTION AND PURPOSE

The Low-Level Radioactive Waste Policy Amendments Act of 1985 (the Act) (42 U.S.C. 2021b et seq.) was enacted January 15, 1986. Section 10 of the Act addresses disposal of wastes termed "below regulatory concern" that would not need to be subject to regulatory control to assure adequate protection of the public health and safety because of their radioactive content. The goal of this section of the Act is for the Commission to make practical and timely decisions to determine when wastes need not go to a licensed low-level waste disposal site. These decisions will be expressed through rulemaking. Alternative disposal would conserve space in the existing sites while new sites are established and reduce the costs of disposal. Rulemaking petitions may play a role in the national low-level waste strategy outlined by the Act. The Act provides that the Commission establish procedures for acting expeditiously on petitions to exempt specific radioactive waste streams from the Commission's regulations.

The purpose of this statement and accompanying implementation plan is to establish the standards and procedures that will permit the Commission to act upon rulemaking petitions in an expeditious manner as called for in the Act. This policy statement does not require petitioners to present all the information outlined or demonstrate that the decision criteria for expedited handling can be met, if such expedited handling is not wanted. For example, petitions requesting exemption of concentrations of radionuclides that might result in individual exposures higher than those recommended in the decision criteria may be submitted, but expedited handling cannot be assured.

Finally, this policy statement and accompanying implementation plan are intended to facilitate handling of rulemaking petitions for streams from multiple producers and do not apply to individual licensing actions on single producer waste. Individual licensees who seek approval for disposal of their uniques wastes may continue to submit their disposal plans under 10 CFR 20.302(a).

II. STANDARDS AND PROCEDURES

The standards and procedures needed to handle petitions expeditiously fall into the following three categories: (1) Information petitioners should file in support of the petitions, (2) standards for assessing the adequacy of the proposals and providing petitioners insight on the decision criteria the Commission intends to use so that all relevant informational issues will be addressed in the petition, and (3) the internal NRC administrative procedures for handling the petitions. These three categories are addressed in the attached staff implementation plan. The staff plan was developed in response to Commission direction to provide detailed guidance on implementing the general approach outlined in this policy statement. Although staff may revise it from time to time as experience is gained in processing petitions, the plan outlines a reasonable basis for accomplishing the approach. Staff is to publish revisions as NUREG documents and notice the availability of the revisions in the FEDERAL REGISTER.

As a practical matter, the primary information for justifying and supporting petitions must be supplied by the petitioner if the Commission is to act in an expedited manner. If the petitioner wishes to assure expedited action, the supporting information should be complete enough so that Commission action is primarily limited to independent evaluation and administrative processing.

Decision criteria for judging whether to grant a petition involve the overall impacts of the proposed action, waste properties, and implementation of the proposed exemption. The following criteria address these areas. Petitions which demonstrate that these criteria are met should be suitable for expedited action.

1. Disposal and treatment of the wastes as specified in the petition will result in no significant impact on the quality of the human environment.

2. The maximum expected effective dose equivalent to an individual member of the public does not exceed a few millirem per year for normal operations and anticipated events.

3. The collective doses to the critical population and general population are small.

4. The potential radiological consequences of accidents or equipment malfunction involving the wastes and intrusion into disposal sites after loss of normal institutional controls are not significant.

5. The exemption will result in a significant reduction in societal costs.

6. The waste is compatible with the proposed treatment and disposal options.

7. The exemption is useful on a national scale, i.e., it is likely to be used by a category of licensees or at least a significant portion of a category.

8. The radiological properties of the waste stream have been characterized on a national basis, the variability has been projected, and the range of variation will not invalidate supporting analyses.

9.The waste characterization is based on data on real wastes.

10. The disposed form of the waste has negligible potential for recycle.

11. Licensees can establish effective, licensable, and inspectable programs for the waste prior to transfer to demonstrate compliance.

12. The offsite treatment or disposal medium (e.g., sanitary landfill) does not need to be controlled or monitored for radiation protection purposes.

13. The methods and procedures used to manage the wastes and to assess the impacts are no different from those that would be applied to the corresponding uncontaminated materials.

14. There are no regulatory or legal obstacles to use of the proposed treatment or disposal methods.

III. AGREEMENT STATES

The Low-Level Radioactive Waste Policy Amendments Act of 1985 establishes a national system for dealing with low-level waste disposal. The system assigns to the States responsiblity for disposal capacity for low-level wastes not exceeding Class C wastes as defined in 10 CFR 61.55. Section 10 of the Act encourages a reduction in volume of such wastes subject to State responsiblitiy for disposal through the option of determining that certain wastes need not go to existing licensed disposal facilities or new sites licensed under 10 CFR Part 61 or equivalent State regulations. If radiological safety can be assured, such disposal would conserve space in the existing sites while new sites are developed, and would serve as an important adjunct to volume reduction efforts in meeting the waste volume allocation limits set forth in the Act. Thus, these rulemakings should aid the States in fulfilling their responsibilities under the Act. Equity also suggests that all waste generators be able to take advantage of below regulatory concern options as part of their waste management strategies. Generators in both Agreeement and non-Agreement States will be competing for space in the existing sites and the concept should be applicable nationwide.

Agreement States will play an important role in ensuring that the system works on a national basis and that it remains equitable. States have been encouraging findings that certain wastes are below regulatory concern and do not have to go to low-level waste sites. The States have been voicing this view for a number of years through forums such as the Conference of Radiation Control Program Directors. Rulemakings granting petitons will be made a matter of compatibility for Agreement States. Consequently, rulemaking will be coordinated with the States.

IV. FUTURE ACTION

The Commission will conduct a generic rulemaking on waste streams below regulaory concern based on a number of factors. The factors include public comments re-eived on the statement, the number and ypes of petitons for rulemaking received, nd how effective the statement is in ena-ling timely processing of petitions. A ge-eric rulemaking is warranted to provide a nore efficient and effective means of ac-omplishing the goals reflected in Section 0 of the Act. An advance notice of pro-osed rulemaking will be published within 0 days. Furthermore, the Commission may eriodically review all rulemakings in order o assure that the relevant parameters have ot changed significantly and may ask the etitioner to submit updated information to ssist in the review. The Commission would lso have to confirm that approved exemp-ions are consistent with any general stand-rds issued by EPA.

51 FR 30839, Aug. 29, 1986]

PPENDIX C—GENERAL STATEMENT OF POLICY AND PROCEDURE FOR NRC ENFORCEMENT ACTIONS

The following statement of general policy nd procedure explains the enforcement olicy and procedures of the U.S. Nuclear Regulatory Commission and its staff in ini-iating enforcement actions, and of presid-ng officers, the Atomic Safety and Licens-g Appeal Boards, and the Commission in eviewing these actions. This statement is pplicable to enforcement in matters involv-ng the public health and safety, the ommon defense and security, and the envi-onment.[1] This statement of general policy nd procedure is published in the Code of ederal Regulations to provide widespread issemination of the Commissions Enforce-ent Policy. However, this is a policy state-ent and not a regulation. The Commission ay deviate from this statement of policy nd procedure as is appropriate under the ircumstances of a particular case.

I. INTRODUCTION AND PURPOSE

The purpose of the NRC enforcement pro-ram is to promote and protect the radiolog-cal health and safety of the public, includ-ng employees' health and safety, the ommon defense and security, and the envi-onment by:

- Ensuring compliance with NRC regula-ions and license conditions;
- Obtaining prompt correction of viola-ions and adverse quality conditions which ay affect safety;
- Deterring future violations and occurrences of conditons adverse to quality; and
- Encouraging improvement of licensee and vendor [1a] performance, and by example, that of industry, including the prompt identification and reporting of potential safety problems.

Consistent with the purpose of this program, prompt and vigorous enforcement action will be taken when dealing with licensees or vendors who do not achieve the necessary meticulous attention to detail and the high standard of compliance which the NRC expects. Each enforcement action is dependent on the circumstances of the case and requires the exercise of discretion after consideration of these policies and procedures. In no case, however, will licensees who cannot achieve and maintain adequate levels of protection be permitted to conduct licensed activities.

II. STATUTORY AUTHORITY AND PROCEDURAL FRAMEWORK

A. Statutory Authority

The NRC's enforcement jurisdiction is drawn from the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act (ERA) of 1974, as amended.

Section 161 of the Atomic Energy Act authorizes NRC to conduct inspections and investigations and to issue orders as may be necessary or desirable to promote the common defense and security or to protect health or to minimize danger to life or property. Section 186 authorizes NRC to revoke licenses under certain circumstances (e.g., for material false statements, in response to conditions that would have warranted refusal of a license on an original application, for a licensee's failure to build or operate a facility in accordance with the terms of the permit or license, and for violation of an NRC regulation). Section 234 authorizes NRC to impose civil penalties not to exceed $100,000 per violation per day for the violation of certain specified licensing provisions of the Act, rules, orders, and license terms implementing these provisions, and for violations for which licenses can be revoked. In addition to the enumerated provisions in section 234, sections 84 and 147 authorize the imposition of civil penalties for violations of regulations implementing those provisions. Section 232 authorizes NRC to seek injunctive or other equitable relief for violation of regulatory requirements.

Section 206 of the Energy Reorganization Act authorizes NRC to impose civil penalties for knowing and conscious failures to provide certain safety information to the NRC.

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[1] Antitrust enforcement matters will be ealt with on a case-by-case basis.

[1a] The term "vendor" means a supplier of products or services to be used in an NRC-licensed facility or activity.

Chapter 18 of the Atomic Energy Act provides for varying levels of criminal penalties (i.e., monetary fines and imprisonment) for willful violations of the Act and regulations or orders issued under sections 65, 161(b), 161(i), or 161(o) of the Act. Section 223 provides that criminal penalties may be imposed on certain individuals employed by firms constructing or supplying basic components of any utilization facility if the individual knowingly and willfully violates NRC requirements such that a basic component could be significantly impaired. Section 235 provides that criminal penalties may be imposed on persons who interfere with inspectors. Section 236 provides that criminal penalties may be imposed on persons who attempt to or cause sabotage at a nuclear facility or to nuclear fuel. Alleged or suspected criminal violations of the Atomic Energy Act are referred to the Department of Justice for appropriate action.

B. Procedural Framework

Subpart B of 10 CFR Part 2 of NRC's regulations sets forth the procedures the NRC uses in exercising its enforcement authority. 10 CFR 2.201 sets forth the procedures for issuing notices of violation.

The procedure to be used in assessing civil penalties is set forth in 10 CFR 2.205. This regulation provides that the appropriate NRC Office Director initiates the civil penalty process by issuing a notice of violation and proposed imposition of a civil penalty. The licensee is provided an opportunity to contest in writing the proposed imposition of a civil penalty. After evaluation of the licensee's response, the Director may mitigate, remit, or impose the civil penalty. An opportunity is provided for a hearing if a civil penalty is imposed.

The procedure for issuing an order to show cause why a license should not be modified, suspended, or revoked or why such other action should not be taken is set forth in 10 CFR 2.202. The mechanism for modifying a license by order is set forth in 10 CFR 2.204. These sections of Part 2 provide an opportunity for a hearing to the affected licensee. However, the NRC is authorized to make orders immediately effective if the public health, safety or interest so requires or, in the case of an order to show cause, if the alleged violation is willful.

III. SEVERITY OF VIOLATIONS

Regulatory requirements[2] have varying degrees of safety, safeguards, or environmental significance. Therefore, the relative importance of each violation must be identified as the first step in the enforcement process.

Consequently, violations are categorized in terms of five levels of severity to show their relative importance within each of the following eight activity areas:

I. Reactor Operations;
II. Facility Construction;
III. Safeguards;
IV. Health Physics;
V. Transportation;
VI. Fuel Cycle and Materials Operations;
VII. Miscellaneous Matters; and
VIII. Emergency Preparedness.

Licensed activities not directly covered by one of the above listed areas, e.g., export license activities, will be placed in the activity area most suitable in light of the particular violation involved. Within each activity area, Severity Level I has been assigned to violations that are the most significant and Severity Level V violations are the least significant. Severity Level I and II violations are of very significant regulatory concern. In general, violations that are included in these severity categories involve actual or high potential impact on the public. Severity Level III violations are cause for significant concern. Severity Level IV violations are less serious but are of more than minor concern; i.e., if left uncorrected, they could lead to a more serious concern. Severity Level V violations are of minor safety or environmental concern.

Comparisons of significance between activity areas are inappropriate. For example, the immediacy of any hazard to the public associated with Severity Level I violations in Reactor Operations is not directly comparable to that associated with Severity Level I violations in Reactor Construction. While examples are provided in Supplements I through VIII for determining the appropriate severity level for violations in each of the eight acitivity areas, the examples are neither exhaustive nor controlling.

These examples do not create new requirements. Each is designed to illustrate the significance which the NRC places on a particular type of violation of NRC requirements. Each of the examples in the supplements is predicated on a violation of a regulatory requirement.

In each case, the severity of a violation will be characterized at the level best suited to the significance of the particular violation. In some cases, violations may be evaluated in the aggregate and a single severity level assigned for a group of violations.

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[2] The term "requirement" as used in this policy means a legally binding requirement such as a statute, regulation, license condition, technical specification, or order.

The severity level of a violation may be increased if the circumstances surrounding the matter involve careless disregard of requirements, deception, or other indication of willfulness. The term "willfullness" as used here embraces a spectrum of violations ranging from deliberate intent to violate or falsify to and including careless disregard for requirements. Willfulness does not include acts which do not rise to the level of careless disregard, e.g., inadvertent clerical errors in a document submitted to the NRC. In determining the specific severity level of a violation involving willfulness, consideration will be given to such factors as the position of the person involved in the violation (e.g., first-line supervisor or senior manager), the significance of any underlying violation, the intent of the violator (i.e., negligence not amounting to careless disregard, careless disregard, or deliberateness), and the economic advantage, if any, gained as a result of the violation. The relative weight given to each of these factors in arriving at the appropriate severity level will be dependent on the circumstances of the violation.

The NRC expects licensees to provide full, complete, timely, and accurate information and reports. Accordingly, unless otherwise categorized in the Supplements, the severity level of a violation involving the failure to make a required report to the NRC will be based upon the significance of and the circumstances surrounding the matter that should have been reported. A licensee will not normally be cited for a failure to report a condition or event unless the licensee was actually aware of the condition or event which it failed to report. However, the severity level of an untimely report, in contrast to no report, may be reduced depending on the circumstances surrounding the matter.

IV. ENFORCEMENT CONFERENCES

Whenever the NRC has learned of the existence of a potential violation for which a civil penalty or other escalated enforcement action may be warranted, or recurring nonconformance on the part of a vendor, the NRC will normally hold an enforcement conference with the licensee or vendor prior to taking enforcement action. The NRC may also elect to hold an enforcement conference for other violations, e.g., Severity Level IV violation which, if repeated, could lead to escalated enforcement action. The purpose of the enforcement conference is to (1) discuss the violations or nonconformance, their significance and causes, and the licensee's or vendor's corrective actions, (2) determine whether there are any aggravating or mitigating circumstances, and (3) obtain other information which will help determine the appropriate enforcement action.

In addition, during the enforcement conference, the licensee or vendor will be given an opportunity to explain to the NRC what corrective actions (if any) were taken or will be taken following discovery of the potential violation or nonconformance. Licensees or vendors will be told when a meeting is an enforcement conference. Enforcement conferences will not normally be open to the public.

When needed to protect the public health and safety or common defense and security, escalated enforcement action, such as the issuance of an immediately effective order modifying, suspending, or revoking a license, will be taken prior to the enforcement conference. In such cases, an enforcement conference may be held after the escalated enforcement action is taken.

V. ENFORCEMENT ACTIONS

This section describes the enforcement sanctions available to NRC and specifies the conditions under which each may be used. The basic sanctions are notices of violaton, civil penalties, and orders of various types. Additionally, related administrative mechanisms such as bulletins and confirmatory action letters, notices of nonconformance and notices of deviation are used to supplement the enforcement program. In selecting the enforcement sanctions to be applied, NRC will consider enforcement actions taken by other Federal or State regulatory bodies having concurrent jurisdiction, such as in transportation matters. Usually whenever a violation of NRC requirements is identified, enforcement action is taken. The nature and extent of the enforcement action is intended to reflect the seriousness of the violation involved. For the vast majority of violations, action by an NRC regional office is appropriate in the form of a Notice of Violation requiring a formal response from the recipient describing its corrective actions. In situations involving nonconformance on the part of vendor, a Notice of Nonconformance will be issued. The relatively small number of cases involving elevated enforcement action receives substantial attention by the public, and may have significant impact on the licensee's operation. These elevated enforcement actions include civil penalties; orders modifying, suspending or revoking licenses; or orders to cease and desist from designated activities.

A. Notice of Violation

A notice of violation is a written notice setting forth one or more violations of a legally binding requirement. The notice normally requires the recipient to provide a written statement describing (1) corrective steps which have been taken and the results achieved; (2) corrective steps which will be taken to prevent recurrence; and (3) the date when full compliance will be achieved. NRC may require responses to notices of violation to be under oath. Normally, responses under oath will be required only in connection with civil penalties and orders.

NRC uses the notice of violation as the standard method for formalizing the existence of a violation. A notice of violation is normally the only enforcement action taken, except in cases where the criteria for civil penalties and orders, as set forth in Sections V.B and V.C, respectively, are met. In such cases, the notice of violation will be issued in conjunction with the elevated actions.

However, violation findings warranting the exercise of discretion under Section V.G.1 will generally not result in a Notice of Violation. In addition, for isolated Severity Level V violations, a notice of violation normally will not be issued regardless of who identifies the violation provided that the licensee has initiated appropriate corrective action before the inspection ends. In these situations, a formal response from the licensee is not required and the inspection report or official field notes serves to document the violations and the corrective actions. However, a notice of violation will normally be issued for willful violations, if past corrective actions for similar violations have not been sufficient to prevent recurrence, or if the circumstances warrant increasing the severity of Level V violations to a higher severity level.

Licensees are not ordinarily cited for violations resulting from matters not within their control, such as equipment failures that were not avoidable by reasonable licensee quality assurance measures or management controls. Generally, however, licensees are held responsible for the acts of their employees. Accordingly, this policy should not be construed to excuse personnel errors.

B. Civil Penalty

A civil penalty is a monetary penalty that may be imposed for violation of (a) certain specified licensing provisions of the Atomic Energy Act or supplementary NRC rules or orders, (b) any requirement for which a license may be revoked, or (c) reporting requirements under Section 206 of the Energy Reorganization Act. Civil penalties are designed to emphasize the need for lasting remedial action and to deter future violations.

Civil penalties are proposed absent mitigating circumstances for Severity Level I and II violations, are considered for Severity Level III violations, and may be imposed for Severity Level IV violations that are similar[3] to previous violations for which the licensee did not take effective corrective action.

In applying this guidance for Severity Level III violations, NRC may, notwithstanding the mitigating and escalating factors in this section, refrain from proposing a civil penalty for violations that warrant the exercise of discretion under Section V.G. As to Severity Level IV violations, NRC normally considers civil penalties only for similar Severity Level IV violations that occur after the date of the last inspection or within two years, whichever period is greater.

Civil penalties will normally be assessed for knowing and conscious violations of the reporting requirements of Section 206 of the Energy Reorganization Act, and for any willful violation of any Commission requirement including those at any severity level.

NRC imposes different levels of penalties for different severity level violations and different classes of licensees. Tables 1A and 1B show the basic civil penalties for various reactor, fuel cycle, and materials programs. The structure of these tables generally takes into account the gravity of the violation as a primary consideration and the ability to pay as a secondary consideration. Generally, operations involving greater nuclear material inventories and greater potential consequences to the public and licensee employees receive higher civil penalties. Regarding the secondary factor of ability of various classes of licensees to pay the civil penalties, it is not the NRC's intention that the economic impact of a civil penalty be such that it puts a licensee out of business (orders, rather than civil penalties, are used when the intent is to terminate licensed activities) or adversely affects a licensee's ability to safely conduct licensed activities. The deterrent effect of civil penalties is best served when the amount of such penalties take into account a licensee's "ability to pay." In determining the amounts of civil penalties for licensees for whom the tables do not reflect the ability to pay, NRC will consider as necessary an increase or decrease on a case-by-case basis.

NRC attaches great importance to comprehensive licensee programs for detection, correction, and reporting of problems that may constitute, or lead to, violation of regulatory requirements. This is emphasized by giving credit for effective licensee audit programs when licensees find, correct, and report problems expeditiously and effective-ty. To encourage licensee self-identification and correction of violations and to avoid potential concealment of problems of safety significance, application of the adjustment factors set forth below may result in no civil penalty being assessed for violations which are identified, reported (if required), and effectively corrected by the licensee.

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[3] The word "similar," as used in this policy, refers to those violations which could have been reasonably expected to have been prevented by the licensee's corrective action for the previous violation.

On the other hand, ineffective licensee programs for problem identification or correction are unacceptable. In cases involving willfulness, flagrant NRC-identified violations, repeated poor performance in an area of concern, or serious breakdown in management controls, NRC intends to apply its full enforcement authority where such action is warranted, including issuing appropriate orders and assessing civil penalties for continuing violations on a per day basis, up to the statutory limit of $100,000 per violation, per day. In this regard, while management involvement, direct or indirect, in a violation may lead to an increase in the civil penalty, the lack of such involvement may not be used to mitigate a civil penalty.

Allowance of mitigation could encourage lack of management involvement in licensed activities and a decrease in protection of the public health and safety.

NRC reviews each proposed civil penalty case on its own merits and adjusts the base civil penalty values upward or downward appropriately. Tables 1A and 1B identify the base civil penalty values for different severity levels, activity areas, and classes of licensees. After considering all relevant circumstances, adjustments to these values may be made for the factors described below:

1. Identification and Reporting

Reduction of up to 50% of the base civil penalty shown in Table 1 may be given when a licensee identifies the violation and promptly reports the violation to the NRC. In weighing this factor, consideration will be given to, among other things, the opportunity available to discover the violation, the ease of discovery and the promptness and completeness of any required report. No consideration will be given to a reduction in penalty if the licensee does not take immediate action to correct the problem upon discovery. On the other hand, the base penalty may be increased by as much as 50% if the NRC identifies the violation provided the licensee should have reasonably discovered the violation before the NRC identified it.

2. Corrective Action To Prevent Recurrence

Recognizing that corrective action is always required to meet regulatory requirements, the promptness and extent to which the licensee takes corrective action, including actions to prevent recurrence, may result in up to a 50% increase or decrease in the base civil penalty shown in Table 1. For example, very extensive corrective action may result in reducing the proposed civil penalty as much as 50% of the base value shown in Table 1. On the other hand, the civil penalty may be increased as much as 50% of the base value if initiation of corrective action is not prompt or if the corrective action is only minimally acceptable. In weighing this factor, consideration will be given to, among other things, the timeliness of the corrective action, degree of licensee initiative, and comprehensiveness of the corrective action—such as whether the action is focused narrowly to the specific violation or broadly to the general area of concern.

3. Past Performance

Reduction by as much as 100% of the base civil penalty shown in Table 1 may be given for prior good performance. On the other hand, the base civil penalty may be increased as much as 100% for prior poor performance.

In weighing this factor, consideration will be given to, among other things, the effectiveness of previous corrective action for similar problems, overall performance such as Systematic Assessment of Licensee Performance (SALP) evaluations for power reactors, and prior performance including Severity Level IV and V violations in the area of concern. For example, failure to implement previous corrective action for prior similar problems may result in an increase in the civil penalty. For purpose of assessing past performance, violations within the past two years of the inspection at issue or the period within the last two inspections whichever is longer will be considered.

4. Prior Notice of Similar Events

The base civil penalty may be increased as much as 100% for cases where the licensee had prior knowledge of a potential problem as a result of a licensee review, a specific NRC or industry notifications or other reasonable indication of a potential problem, and had failed to take effective preventive steps. Prior notice may include findings of NRC, the licensee, or industry made at other facilities of the licensee where it is reasonable to expect the licensee to take action to prevent similar problems at the facility subject to the enforcement action at issue.

5. Multiple Occurrences

The base civil penalty may be increased as much as 100% where multiple examples of a particular violation are identified during the inspection period.

6. Duration

The duration of a violation may also be considered in assessing a civil penalty. A greater civil penalty may be imposed if a violation continues for more than a day. For example:

(1) If a licensee is aware of the existence of a condition which results in an ongoing violation and fails to initiate corrective action, each day the condition existed may be considered as a separate violation and, as such, subject to a separate additional civil penalty.

(2) If a licensee (a) is unaware of a condition resulting in a continuing violation, but clearly should have been aware of the condition or (b) had an opportunity to correct the condition but failed to do so, a separate violation and attendant civil penalty may be considered for each day that the licensee clearly should have been aware of the condition or had an opportunity to correct the condition, but failed to do so.

(3) Alternatively, whether or not a licensee is aware or clearly should have been aware of a violation that continues for more than one day, the base civil penalty may be increased as much as 100% to reflect the added significance resulting from the duration of the violation.

7. Maintenance-Related Cause

The base civil penalty may be increased as much as 50% for cases where a cause of a maintenance-related violation at a power reactor is a programmatic failure. For the purposes of application of this factor, a cause of the violation shall be considered to be maintenance-related if the violation could have been prevented by implementing a maintenance program consistent with the scope and activities defined by the Revised Policy Statement on the Maintenance of Nuclear Power Plants. In assessing this factor, consideration will be given to, among other things, whether a failure to perform maintenance or improperly performed maintenance was a programmatic failure. The degree of the programmatic failure will be considered in applying this factor.

The above factors are additive. However, in no instance will a civil penalty for any one violation exceed $100,000 per day.

The Tables and the mitigating factors determine the civil penalties which may be assessed for each violation. However, to focus on the fundamental underlying causes of a problem for which enforcement action appears to be warranted, the cumulative total for all violations which contributed to or were unavoidable consequences of that problem may be based on the amount shown in the table for a problem of that Severity Level, as adjusted. If an evaluation of such multiple violations shows that more than one fundamental problem is involved, each of which, if viewed independently, could lead to civil penalty action by itself, then separate civil penalties may be assessed for each such fundamental problem. In addition, the failure to make a required report of an event requiring such reporting is considered a separate problem and will normally be assessed a separate civil penalty, if the licensee is aware of the matter that should have been reported.

TABLE 1A.—BASE CIVIL PENALTIES

	Plant operations, construction, health physics and EP	Transportation		
		Safeguards	Greater than type A quantity [1]	Type A quantity or less [2]
a. Power reactors	$100,000	$100,000	$100,000	$5,000
b. Test reactors	10,000	10,000	10,000	2,000
c. Research reactors and critical facilities	5,000	5,000	5,000	1,000
d. Fuel fabricators and industrial processors [3]	25,000	[4] 100,000	25,000	5,000
e. Mills and uranium conversion facilities	10,000		5,000	2,000
f. Industries users of material [5]	10,000		5,000	2,000
g. Waste disposal licensees	10,000		5,000	2,000
h. Academic or medical institutions [6]	5,000		2,500	1,000
i. Independent spent fuel and monitored retrievable storage installations	25,000	100,000	25,000	5,000
j. Other material licensees	1,000		2,500	1,000

[1] Includes irradiated fuel, high level waste, unirradiated fissile material, and any other quantities requiring Type B packaging

[2] Includes low specific activity waste (LSA), low level waste, Type A packages, and excepted quantities and articles

[3] Large firms engaged in manufacturing or distribution of byproduct, source, or special nuclear material.

[4] This amount refers to Category 1 licensees (as defined in 10 CFR 73.2). Licensed fuel fabricators not authorized to possess Category 1 material have a base penalty amount of $50,000.

[5] Includes industrial radiographers, nuclear pharmacies, and other industrial users.

[6] This applies to nonprofit institutions not otherwise categorized under sections "a" through "g" in this table.

TABLE 1B.—BASE CIVIL PENALTIES

Severity Level	Base Civil Penalty Amount (Percent of amount listed in Table 1A)
I	100
II	80
III	50
IV	15
V	5

C. Orders

An order is a written NRC directive to modify, suspend, or revoke a license; to cease and desist from a given practice or activity; or to take such other action as may be proper (*see* 10 CFR 2.202 and 2.204). Orders may be issued as follows. Orders may also be issued in lieu of, or in addition to, civil penalties, as appropriate.

(1) License Modification Orders are issued when some change in licensee equipment, procedures, or management controls is necessary.

(2) Suspension Orders may be used:

(a) To remove a threat to the public health and safety, common defense and security, or the environment;

(b) To stop facility construction when (i) further work could preclude or significantly hinder the identification or correction of an improperly constructed safety-related system or component, or (ii) the licensee's quality assurance program implementation is not adequate to provide confidence that construction activities are being properly carried out;

(c) When the licensee has not responded adequately to other enforcement action;

(d) When the licensee interferes with the conduct of an inspection or investigation; or

(e) For any reason not mentioned above for which license revocation is legally authorized.

Suspensions may apply to all or part of the licensed activity. Ordinarily, a licensed activity is not suspended (nor is a suspension prolonged) for failure to comply with requirements where such failure is not willful and adequate corrective action has been taken.

(3) Revocation Orders may be used:

(a) When a licensee is unable or unwilling to comply with NRC requirements,

(b) When a licensee refuses to correct a violation,

(c) When a licensee does not respond to a notice of violation where a response was required,

(d) When a licensee refuses to pay a fee required by 10 CFR Part 170, or

(e) For any other reason for which revocation is authorized under section 186 of the Atomic Energy Act (e.g., any condition which would warrant refusal of a licensee on an original application).

(4) Cease and Desist Orders are typically used to stop an unauthorized activity that has continued after notification by NRC that such activity is unauthorized.

Orders are made effective immediately, without prior opportunity for hearing, whenever it is determined that the public health, interest, or safety so requires, or when the order is responding to a violation involving willfulness. Otherwise, a prior opportunity for a hearing on the order is afforded. For cases in which the NRC believes a basis could reasonably exist for not taking the action as proposed, the licensee will ordinarily be afforded an opportunity to show cause why the order should not be issued in the proposed manner.

D. Escalation of Enforcement Sanctions

NRC considers violations of Severity Level I, II, or III to be serious. If serious violations occur, NRC will, where necessary, issue orders in conjunction with civil penalties to achieve immediate corrective actions and to deter further recurrence of serious violations. NRC carefully considers the circumstances of each case in selecting and applying the sanction(s) appropriate to the case in accordance with the criteria described in Sections V.B and V.C.

Examples of enforcement actions that could be taken for similar Severity Level I, II, or III violations are set forth in Table 2. The actual progression to be used in a particular case will depend on the circumstances. However, enforcement sanctions will normally escalate for recurring similar violations.

TABLE 2.—EXAMPLES OF PROGRESSION OF ESCALATED ENFORCEMENT ACTIONS FOR SIMILAR VIOLATIONS IN THE SAME ACTIVITY AREA UNDER THE SAME LICENSE

Severity of violation	Number of similar violations from the date of the last inspection or within the previous two years (whichever period is greater)		
	1st	2nd	3rd
I	a + b	a + b + c	d
II	a	a + b	a + b + c
III		a	a + b

a. Civil penalty.

b. Suspension of affected operations until the Office Director is satisfied that there is reasonable assurance that the licensee can operate in compliance with the applicable requirements; or modification of the license, as appropriate.

c. Show cause for modification or revocation of the license, as appropriate.

d. Further action, as appropriate.

E. Enforcement Actions Involving Individuals

Enforcement actions involving individuals, including licensed operators, are significant personnel actions, which will be closely controlled and judiciously applied. An enforcement action will normally be taken only when there is little doubt that the individual fully understood, or should have understood, his or her responsibility; knew, or should have known, the required actions; and knowingly, or with careless disregard (i.e., with more than mere negligence) failed to take required actions which have actual or potential safety significance. Most transgressions of individuals at the level of Severity Level III, IV, or V violations will be handled by citing only the facility licensee.

More serious violations, including those involving the integrity of an individual (e.g., lying to the NRC) concerning matters within the scope of the individual's responsibilities, will be considered for enforcement action against the individual. Action against the individual, however, will not be taken if the improper action by the individual was caused by management failures. The following examples of situations illustrate this concept:

- Inadvertent individual mistakes resulting from inadequate training or guidance provided by the facility licensee.
- Inadvertently missing an insignificant procedural requirement when the action is routine, fairly uncomplicated, and there is no unusual circumstance indicating that the procedures should be referred to and followed step-by-step.
- Compliance with an express direction of management, such as the Shift Supervisor or Plant Manager, resulted in a violation unless the individual did not express his or her concern or objection to the direction.
- Individual error directly resulting from following the technical advice of an expert unless the advice was clearly unreasonable and the licensed individual should have recognized it as such.
- Violations resulting from inadequate procedures unless the individual used a faulty procedure knowing it was faulty and had not attempted to get the procedure corrected.

Examples of situations which could result in enforcement actions against individuals include, but are not limited to, violations which involve:

- Recognizing a violation of procedural requirements and willfully not taking corrective action.
- Willfully performing unauthorizing bypassing of required reactor safety systems.
- Willfully defeating alarms which have safety significance.
- Unauthorized abandoning of reactor controls.
- Inattention to duty such as sleeping, being intoxicated while on duty, or otherwise not meeting requirements for fitness for duty.
- Willfully taking actions that violate Technical Specification Limiting Conditions for Operation (enforcement action for a willful violation will not be taken if the operator meets the standards of 10 CFR 50.54(x), i.e., unless the operator acted unreasonably considering all the relevant circumstances surrounding the emergency.)
- Falsifying records required for NRC regulations or by the facility licensee.
- Willfully failing to take "immediate actions" of emergency procedures.
- Willfully withholding safety significant information rather than making such information known to appropriate supervisory or technical personnel.

Any proposed enforcement action against individuals must be done with the concurrence of the Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support. The opportunity for an Enforcement Conference with the individual will usually be provided.

Examples of sanctions that may be appropriate against NRC-licensed operators are:

- Issuance of a letter of reprimand to be placed in the operator's license file,
- Issuance of a Notice of Violation, and
- Suspension for a specified period, modification, or revocation of the license.

The sanctions are listed in escalating order of significance.[4] The particular sanction to be used should be determined on a case-by-case basis.

In addition, NRC may take enforcement action where the conduct of the individual places in question the NRC's reasonable assurance that licensed activities will be properly conducted. The NRC may take enforcement action for reasons that would warrant refusal to issue a license on an original application. Accordingly, enforcement action may be taken regarding matters that raise issues of integrity, competence, fitness for duty, or other matters that may not necessarily be a violation of specific Commission requirements.

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[4] Except for individuals subject to civil penalties under section 206 of the Energy Reorganization Act of 1974, as amended, NRC will not normally impose a civil penalty against an individual. However, section 234 of the Atomic Energy Act (AEA) gives the Commission authority to impose civil penalties for violations on "any person." "Person" is broadly defined in section 11s of the AEA to include individuals, a variety of organizations, and any representatives or agents. This gives the Commission authority to impose civil penalties on employees of licensees or on separate entities when a violation of a requirement directly imposed on them is committed.

In the case of an unlicensed individual, an Order modifying the facility license to require the removal of the individual from all nuclear-related activities for a specified period of time or indefinitely may be appropriate.

F. Reopening Closed Enforcement Actions

If significant new information is received or obtained by NRC which indicates that an enforcement sanction was incorrectly applied, consideration may be given, dependent on the circumstances, to reopening a closed enforcement action to increase or decrease the severity of a sanction or to correct the record. Reopening decisions will be made on a case-by-case basis, are expected to occur rarely, and require the specific approval of the Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support.

G. Exercise of Discretion

Because the NRC wants to encourage and support licensee initiative for self-identification and correction of problems, NRC may exercise discretion as follows:

1. NRC may refrain from issuing a notice of violation for a violation described in an inspection report or official field notes that meets all of the following criteria:

a. It was identified by the licensee;

b. It is normally classified at a Severity Level IV or V;

c. It was reported, if required;

d. It was or will be corrected, including measures to prevent recurrence, within a reasonable time; and

e. It was not a willful violation or a violation that could reasonably be expected to have been prevented by the licensee's corrective action for a previous violation.

2. The NRC may refrain from issuing a notice of violation or a proposed civil penalty for violations described in an inspection report or official field notes that meet all of the following criteria:

a. (i) The NRC has taken significant enforcement action based upon a major safety event contributing to an extended shutdown of an operating reactor or a material licensee (or a work stoppage at a construction site), or the licensee is forced into an extended shutdown or work stoppage related to generally poor performance over a long period; (ii) the licensee has developed and is aggressively implementing during the shutdown a comprehensive program for problem identification and correction; and (iii) NRC concurrence is needed by the licensee prior to restart;

b. Non-willful violations are identified by the licensee as the result of its comprehensive program, or as a result of an employee allegation to the licensee. If NRC identifies the violation, the NRC should determine whether enforcement action is necessary to achieve remedial action;

c. The violations are based upon activities of the licensee prior to the events leading to the shutdown; and

d. The violations would normally not be categorized as higher than Severity Level III violations under the NRC's Enforcement Policy.

3. The NRC may refrain from proposing a civil penalty for a Severity Level III violation not involving an overexposure or release of radioactive material that meets all of the following criteria.

a. It was identified by the licensee and reported;

b. Comprehensive corrective action has been taken or is well underway within a reasonable time following identification;

c. It was not a violation that either (i) was reasonably preventable by the licensee's action in response to a previous regulatory concern identified within the past two years of the inspection or since the last two inspections whichever is longer or (ii) reasonably should have been corrected prior to the violation because the licensee had prior notice of the problem involved; and

d. It was not a willful violation or indicative of a breakdown in management controls.

4. The NRC may refrain from proposing a civil penalty for a Severity Level III violation involving a past problem, such as in engineering, design, or installation, that meets the following criteria:

a. It was identified by a licensee as a result of a licensee's voluntary formal effort such as a Safety System Functional Inspection, Design Reconstitution Program, or other program that has a defined scope and timetable which is being aggressively implemented and reported;

b. Comprehensive corrective action has been taken or is well underway within a reasonable time following identification; and

c. It was not likely to be identified by routine licensee efforts such as normal surveillance or QA activities.

5. If the NRC issues an enforcement action for a violation at a Severity Level III violation and as part of the corrective action for that violation, the licensee identifies other examples of the violation with the same root cause, the NRC may refrain from issuing an additional enforcement action. In determining whether to exercise this discretion, the NRC will consider whether the licensee acted reasonably and in a timely manner appropriate to the safety significance of the initial violation, the comprehensiveness of the corrective action, whether the matter was reported, and whether

the additional violation(s) substantially change the safety significance or character of the regulatory concern arising out of the initial violation.

Notwithstanding paragraphs 2, 3, 4, and 5 above, a civil penalty may be proposed when judgment warrants it on the basis of the circumstances of the individual case. For example, civil penalties may be warranted where multiple Severity Level III violations are discovered or where the violation is willful. In addition, as provided in Section VIII, Responsibilities, the Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support may refrain from issuing a civil penalty or a notice of violation for a Severity Level III violation based on the merits of the case after considering the guidance in this statement of policy and such factors as the age of the violation, the safety significance of the violation, the overall performance of the licensee, and circumstances, if any, that have changed since the violation provided prior notice has been given the Commission. This discretion is expected to be exercised only where application of the normal guidance in the Policy is unwarranted.

H. Related Administrative Actions

In addition to the formal enforcement mechanisms of notices of violation, civil penalties, and orders, NRC also uses administrative mechanisms, such as bulletins, information notices, generic letters, notices of deviation, notices of nonconformance, and confirmatory action letters to supplement its enforcement program. NRC expects licensees and vendors to adhere to any obligations and commitments resulting from these processes and will not hesitate to issue appropriate orders to licensees to make sure that such commitments are met.

(1) Bulletins, Information Notices, and Generic Letters are written notifications to groups of licensees identifying specific problems and recommending specific actions.

(2) Notices of Deviation are written notices describing a licensee's failure to satisfy a commitment where the commitment involved has not been made a legally binding requirement. A notice of deviation requests a licensee to provide a written explanation or statement describing corrective steps taken (or planned), the results achieved, and the date when corrective action will be completed.

(3) Confirmatory Action Letters are letters confirming a licensee's or a vendor's agreement to take certain actions to remove significant concerns about health and safety, safeguards, or the environment.

(4) Notices of Nonconformance are written notices describing non-licensees' failure to meet commitments which have not been made legally binding requirements by NRC. An example is a commitment made in a procurement contract with a licensee as required by 10 CFR Part 50, Appendix B. Notices of Nonconformance request non-licensees to provide written explanations or statements describing corrective steps (taken or planned), the results achieved, the dates when corrective actions will be completed, and measures taken to preclude recurrence.

I. Referrals to Department of Justice

Alleged or suspected criminal violations of the Atomic Energy Act (and of other relevant Federal laws) are referred to the Department of Justice for investigation. Referral to the Department of Justice does not preclude the NRC from taking other enforcement action under this General Statement of Policy. However, such actions will be coordinated with the Department of Justice to the extent practicable.

VI. INACCURATE AND INCOMPLETE INFORMATION

A violation of the regulations on submitting complete and accurate information whether or not considered a material false statement, can result in the full range of enforcement sanctions. The labeling of a communication failure as a material false statement will be made on a case-by-case basis and will be reserved for egregious violations. Violations involving inaccurate or incomplete information or the failure to provide significant information identified by a licensee normally will be categorized based on the guidance herein, in Section III "Severity of Violations," and in Supplement VII.

The Commission recognizes that oral information may in some situations be inherently less reliable than written submittals because of the absence of an opportunity for reflection and management review. However, the Commission must be able to rely on oral communications from licensee officials concerning significant information. A licensee official for purposes of application of the Enforcement Policy means a first line supervisor or above as well as a licensed individual, radiation safety officer, or a person listed on a license as an authorized user of licensed material. Therefore, in determining whether to take enforcement action for an oral statement, consideration may be given to such factors as (1) the degree of knowledge that the communicator should have had, regarding the matter, in view of his or her position, training, and experience, (2) the opportunity and time available prior to the communication to assure the accuracy or completeness of the information, (3) the degree of intent or negligence, if any, involved, (4) the formality of the communication, (5) the reasonableness of NRC reliance on the information, (6) the importance of the information which was wrong or not provided, and (7) the reasonableness of the explanation for not providing complete and accurate information.

Absent at least careless disregard, an incomplete or inaccurate unsworn oral statement normally will not be subject to enforcement action unless it involves significant information provided by a licensee official. However, enforcement action may be taken for an unintentionally incomplete or inaccurate oral statement provided to the NRC by a licensee official or others on behalf of a licensee, if a record was made of the oral information and provided to the licensee thereby permitting an opportunity to correct the oral information, such as if a transcript of the communication or meeting summary containing the error was made available to the licensee and was not subsequently corrected in a timely manner.

When a licensee has corrected inaccurate or incomplete information, the decision to issue a citation for the initial inaccurate or incomplete information normally will be dependent on the circumstances, including the ease of detection of the error, the timeliness of the correction, whether the NRC or the licensee identified the problem with the communication, and whether the NRC relied on the information prior to the correction. Generally, if the matter was promptly identified and corrected by the licensee prior to reliance by the NRC, or before the NRC raised a question about the information, no enforcement action will be taken for the initial inaccurate or incomplete information. On the other hand, if the misinformation is identified after the NRC relies on it, or after some question is raised regarding the accuracy of the information, then some enforcement action normally will be taken even if it is in fact corrected. However, if the initial submittal was accurate when made but later turns out to be erroneous because of newly discovered information or advance in technology, a citation normally would not be appropriate if, when the new information became available, the initial submittal was corrected.

The failure to correct inaccurate or incomplete information which the licensee does not identify as significant normally will not constitute a separate violation. However, the circumstances surrounding the failure to correct may be considered relevant to the determination of enforcement action for the initial inaccurate or incomplete statement. For example, an unintentionally inaccurate or incomplete submission may be treated as a more severe matter if the licensee later determines that the initial submittal was in error and does not correct it or if there were clear opportunities to identify the error. If information not corrected was recognized by a licensee as significant, a separate citation may be made for the failure to provide significant information. In any event, in serious cases where the licensee's actions in not correcting or providing information raise questions about its commitment to safety or its fundamental trustworthiness, the Commission may exercise its authority to issue orders modifying, suspending, or revoking the license. The Commission recognizes that enforcement determinations must be made on a case-by-case basis, taking into consideration the issues described above.

VII. PUBLIC DISCLOSURE OF ENFORCEMENT ACTIONS

In accordance with 10 CFR 2.790, all enforcement actions and licensees' responses are publicly available for inspection. In addition, press releases are generally issued for civil penalties and orders. In the case of orders and civil penalties related to violations at Severity Level I, II, or III, press releases are issued at the time of the order or the proposed imposition of the civil penalty. Press releases are not normally issued for Notices of Violation.

VIII. RESPONSIBILITIES

The Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support (DEDS), as the principal enforcement officer of the NRC, has been delegated the authority to issue notices of violations, civil penalties, and orders.[5] Regional Administrators may also issue notices of violation for Severity Level IV and V violations and may sign notices of violation for Severity Level III violations with no proposed civil penalty and proposed civil penalty actions with the concurrence of the DEDS. In recognition that the regulation of nuclear activities in many cases does not lend itself to a mechanistic treatment, the DEDS or the Regional Administrator must exercise judgment and discretion in determining the severity levels of the violations and the appropriate enforcement sanctions, including the decision to issue a Notice of Violation, or to propose or impose a civil penalty and the amount of such penalty, after considering the general principles of this statement of policy and the technical significance of the violations and the surrounding circumstances.

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[5] The Director, Office of Enforcement, acts for the Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support in the latter's absence or as directed. The Directors of the Offices of Nuclear Reactor Regulation, Nuclear Material Safety and Safeguards, and Special Projects have also been delegated authority to issue orders, but it is expected that normal use of this authority by NRR, NMSS, and OSP will be confined to actions necessary in the interest of public health and safety. The Director, Office of the Controller, has been delegated the authority to issue orders where licensees violate Commission regulations by nonpayment of license fees.

The Commission will be provided written notification of all enforcement actions involving civil penalties or orders. The Commission will be consulted prior to taking action in the following situations (unless the urgency of the situation dictates immediate action):

(1) An action affecting a licensee's operation that requires balancing the public health and safety or common defense and security implications of not operating with the potential radiological or other hazards associated with continued operation;

(2) Proposals to impose civil penalties in amounts greater than 3 times the Severity Level I values shown in Table 1A;

(3) Any proposed enforcement action that involves a Severity Level I violation;

(4) Any enforcement action that involves a finding of a material false statement;

(5) Refraining from taking enforcement action for matters meeting the criteria of Section V.G.2.

(6) Any action the Office Director believes warrants Commission involvement; or

(7) Any proposed enforcement action on which the Commission asks to be consulted.

IX. VENDOR ENFORCEMENT

The Commission's enforcement policy is also applicable to non-licensees (vendors). Vendors of products or services provided for use in nuclear activities are subject to certain requirements designed to ensure that the products or services supplied that could affect safety are of high quality. Through procurement contracts with reactor licensees, vendors are required to have quality assurance programs that meet applicable requirements including 10 CFR Part 50, Appendix B, and 10 CFR Part 71, Subpart H. Vendors of reactor and materials licensees and Part 71 licensees are subject to the requirements of 10 CFR Part 21 regarding reporting of defects in basic components.

The NRC conducts inspections of reactor licensees to determine whether they are ensuring that vendors are meeting their contractual obligations with regard to quality of products or services that could have an adverse effect on safety. As part of the effort of ensuring that licensees fulfill their obligations in this regard, the NRC inspects reactor vendors to determine if they are meeting their obligations. These inspections include examination of the quality asurance programs and their implementation by the vendors through examination of product quality.

The NRC may also inspect vendors, including suppliers of Part 71 and materials licensees, to determine whether they are complying with Part 21. When inspections determine that violations of NRC requirements have occurred, or that vendors have failed to fulfill contractual commitments that could adversely affect the quality of a safety significant product or service, enforcement action will be taken. Notices of Violation and civil penalties will be used, as appropriate, for licensee failures to ensure that their vendors have programs that meet applicable requirements including Part 21. Notices of Violation will be issued for vendors which violate Part 21. Civil penalties will only be imposed against individual directors or responsible officers of a vendor organization who knowingly and consciously fail to provide the notice required by 10 CFR 21.21(b)(1). Notices of Nonconformance will be used for vendors which fail to meet commitments related to NRC activities.

SUPPLEMENT I—SEVERITY CATEGORIES

Reactor Operations

A. Severity I—Violations involving for example:

1. A Safety Limit, as defined in 10 CFR 50.36 and the Technical Specifications, being exceeded;

2. A system[6] designed to prevent or mitigate a serious safety event not being able to perform its intended safety function[7] when actually called upon to work;

3. An accidental criticality; or

4. Release of radioactivity offsite greater than ten (10) times the Technical Specifications limit.[8]

B. Severity II—Violations involving for example:

1. A system designed to prevent or mitigate serious safety events not being able to perform its intended safety function; or

2. Release of radioactivity offsite greater than five (5) times the Technical Specifications limit.

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[6] "System" as used in these supplements, includes administrative and managerial control systems, as well as physical systems.

[7] "Intended safety function" means the total safety function, and is not directed toward a loss of redundancy. For example, considering a BWR's high pressure ECCS capability, the violation must result in complete invalidation of both HPCI and ADS subsystems. A loss of one subsystem does not defeat the intended safety function as long as the other subsystem is operable.

[8] The Technical Specification limit as used in this Supplement (Items A.4, B.2 and C.5) does not apply to the instantaneous release limit.

C. Severity III—Violations involving for example:

1. A significant violation of a Technical Specification Limiting Condition for Operation where the appropriate Action Statement was not satisfied within the time allotted by the Action Statement, such as:

a. In a pressurized water reactor, in the applicable modes, having one high-pressure safety injection pump inoperable for a period in excess of that allowed by the action statement; or

b. In a boiling water reactor, one primary containment isolation valve inoperable for a period in excess of that allowed by the action statement.

2. A system designed to prevent or mitigate a serious safety event not being able to perform its intended function under certain conditions (e.g., safety system not operable unless offsite power is available; materials or components not environmentally qualified);

3. Dereliction of duty on the part of personnel involved in licensed activities;

4. Changes in reactor parameters which cause unanticipated reductions in margins of safety;

5. Release of radioactivity offsite greater than the Technical Specifications limit;

6. A significant failure to meet the requirements of 10 CFR 50.59, including a failure such that a required license amendment was not sought;

7. Licensee failure to conduct adequate oversight of vendors resulting in the use of products or services which are of defective or indeterminate quality and which have safety significance; or

8. Breakdown in the control of licensed activities involving a number of violations that are related or, if isolated, that are recurring violations that collectively represent a potentially significant lack of attention or carelessness toward licensed responsibilities.

D Severity IV—Violations involving for example:

1. A less significant violation of a Technical Specification Limiting Condition for Operation where the appropriate Action Statement was not satisifed within the time allotted by the Action Statement, such as:

a. In a pressurized water reactor, a 5% deficiency in the required volume of the condensate storage tank; or

b. In a boiling water reactor, one subsystem of the two independent MSIV leakage control subsystems inoperable.

2. Failure to meet the requirements of 10 CFR 50.59 that does not result in a Severity Level I, II, or III violation;

3. Failure to meet regulatory requirements that have more than minor safety or environmental significance; or

4. Failure to make a required Licensee Event Report.

E. Severity Level V—Violations that have minor safety or environmental significance.

SUPPLEMENT II—SEVERITY CATEGORIES

Part 50 Facility Construction

A. Severity I—Violations involving a structure or system that is completed[9] in such a manner that it would not have satisfied its intended safety related purpose.

B. Severity II—Violations involving for example:

1. A breakdown in the Quality Assurance (QA) program as exemplified by deficiencies in construction QA related to more than one work activity (e.g., structural, piping, electrical, foundations). Such deficiencies normally involve the licensee's failure to conduct adequate audits or to take prompt corrective action on the basis of such audits and normally involve multiple examples of deficient construction or construction of unknown quality due to inadequate program implementation; or

2. A structure or system that is completed in such a manner that it could have an adverse effect on the safety of operations.

C. Severity III—Violations involving for example:

1. A deficiency in a licensee quality assurance program for construction related to a single work activity (e.g., structural, piping, electrical or foundations). Such significant deficiency normally involves the licensee's failure to conduct adequate audits or to take prompt corrective action on the basis of such audits, and normally involves multiple examples of deficient construction or construction of unknown quality due to inadequate program implementation;

2. Failure to confirm the design safety requirements of a structure or system as a result of inadequate preoperational test program implementation; or

3. Failure to make a required 10 CFR 50.55(e) report.

D. Severity IV—Violations involving failure to meet regulatory requirements including one or more Quality Assurance Criterion not amounting to Severity Level I, II, or III violations that have more than minor safety or environmental significance.

E. Severity V—Violations that have minor safety or environmental significance.

SUPPLEMENT III—SEVERITY CATEGORIES

Safeguards

A. Severity I—Violations involving for example:

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[9] "Completed" means completion of construction including review and acceptance by the construction QA organization.

1. An act of radiological sabotage or actual theft, loss, or diversion of a formula quantity of special nuclear material [10] in which the security system did not function as required; or

2. Actual undetected entry of an unauthorized individual [11] into a vital area [12] from outside the protected area who represents a threat.

B. Severity II—Violations involving for example:

1. Actual theft, loss or diversion of special nuclear material of moderate strategic significance [13] in which the security system did not function as required;

2. Failure or inability to control access such that an unauthorized individual could easily gain undetected access [14] into a vital area from outside the protected area; or

3. Failure to have a security system designed or used to prevent the theft, loss, or diversion of SNM of moderate strategic significance or greater amounts or acts of radiological sabotage.

C. Severity III—Violations involving for example:

1. Failure to conduct an adequate search at the access control point that results in the introduction to the protected area of items that may be useful in radiological sabotage or theft of SNM;

2. Failure or inability to control access such that an unauthorized individual could easily gain undetected access into a vital area from inside the protected area or to the protected area from outside the protected area;

3. Significant failure of the safeguards systems designed or used to prevent or detect the theft, loss, or diversion of SNM or radiological sabotage;

4. Failure to properly secure or protect classified or other sensitive safeguards information which would significantly assist an individual in an act of radiological sabotage or theft of special nuclear material;

5. Significant failure to take compensatory measures for a known security situation that would easily allow unauthorized and undetected access to a protected or vital area;

6. Significant failure to respond to a suspected event in either a timely manner or with an adequate response force; or

7. Breakdown in the security system involving a number of violations that are related or, if isolated, that are recurring violations that collectively reflect a potentially significant lack of attention or carelessness toward licensed responsibilities.

D. Severity IV—Violations involving for example:

1. Failure of a safeguards system designed or used to prevent or detect the theft, loss, or diversion of SNM or radiological sabotage;

2. Failure to respond to a suspected event in either a timely manner or with an adequate response force;

3. Failure to implement 10 CFR Parts 25 and 95 and information addressed under section 142 of the Act, and the NRC approved security plan relevant to those parts;

4. Failure to make, maintain, or provide log entries in accordance with 10 CFR 73.71 (c) and (d);

5. Failure to conduct a proper search at the access control point;

6. Failure to properly secure or protect classified or other sensitive safeguards information which would not significantly assist an individual in an act of radiological sabotage or theft of special nuclear material;

7. Failure to control access such that an opportunity exists that could allow unauthorized and undetected access into the protected area or from the protected area into a vital area but which was not easily exploitable;

8. Inadequate compensatory measures for a known security situation that could allow unauthorized and undetected access;

9. Failure to properly test a security system; or

10. Other violations that have more than minor safeguards significance.

E. Severity V—Violations that have minor safeguards significance such as:

1. Isolated failure to log a security event in accordance with 10 CFR 73.71(c); or

2. Other violations that have minor safeguards significance.

SUPPLEMENT IV—SEVERITY CATEGORIES

Health Physics 10 CFR Part 20 [15]

A. Severity I—Violations involving for example:

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[10] See 10 CFR 73.2 for the definition of "formula quantity".

[11] An unauthorized individual is someone who was not authorized for entrance into the area in question, or not authorized to enter in the manner entered.

[12] The phrase "vital area" includes vital areas, material access areas, and controled access areas.

[13] See 10 CFR 73.2 for the definition of "special nuclear material of moderate strategic significance."

[14] In determining whether access can be easily gained, factors such as predictability, identifiability, and ease of passage should be considered.

[15] Personnel overexposures and associated violations, incurred during a lifesaving effort, will be treated on a case-by-case basis.

1. Single exposure of a worker in excess of 25 rems of radiation to the whole body, 150 rems to the skin of the whole body, or 375 rems to the feet, ankles, hands, or forearms;
2. Annual whole body exposure of a member of the public in excess of 2.5 rems of radiation;
3. Release of radioactive material to an unrestricted area in excess of ten times the limits of 10 CFR 20.106;
4. Disposal of licensed material in quantities or concentrations in excess of ten times the limits of 10 CFR 20.303; or
5. Exposure of a worker in restricted areas of ten times the limits of 10 CFR 20.103.

B. Severity II—Violations involving for example:

1. Single exposure of a worker in excess of 5 rems of radiations to the whole body, 30 rems to the skin of the whole body, or 75 rems to the feet, ankles, hands or forearms;
2. Annual whole body exposure of a member of the public in excess of 0.5 rems of radiation;
3. Release of radioactive material to an unrestricted area in excess of five times the limits of 10 CFR 20.106;
4. Failure to make an immediate notification as required by 10 CFR 20.403(a)(1) and 10 CFR 20.403(a)(2);
5. Disposal of licensed material in quantities or concentrations in excess of five times the limits of 10 CFR 20.303; or
6. Exposure of a worker in restricted areas in excess of five times the limits of 10 CFR 20.103.

C. Severity III—Violations involving for example:

1. Single exposure of a worker in excess of 3 rems of radiation to the whole body, 7.5 rems to the skin of the whole body, or 18.75 rems to the feet, ankles, hands or forearms;
2. A radiation level in an unrestricted area such that an individual could receive greater than 100 millirem in a one hour period or 500 millirem in any seven consecutive days;
3. Failure to make a 24-hour notification as required by 10 CFR 20.403(b) or an immediate notification required by 10 CFR 20.402(a);
4. Substantial potential for an exposure or release in excess of 10 CFR 20 whether or not such exposure or release occurs (e.g., entry into high radiation areas, such as under reactor vessels or in the vicinity of exposed radiographic sources, without having performed an adequate survey, operation of a radiation facility with a nonfunctioning interlock system);
5. Release of radioactive material to an unrestricted area in excess of the limits of 10 CFR 20.106;
6. Improper disposal for licensed material not covered in Severity Levels I or II;
7. Exposure of a worker in restricted areas in excess of the limits of 10 CFR 20.103;
8. Release for unrestricted use of contaminated or radioactive material or equipment which poses a realistic potential for significant exposure to members of the public, or which reflects a programmatic (rather than isolated) weakness in the radiation control program;
9. Cumulative worker exposure above regulatory limits when such cumulative exposure reflects a programmatic, rather than an isolated weakness in radiation protection;
10. Conduct of licensee activities by a technically unqualified person;
11. Significant failure to control licensed material; or
12. Breakdown in the radiation safety program involving a number of violations that are related or, if isolated, that are recurring that collectively represent a potentially significant lack of attention or carelessness toward licensed responsibilities.

D. Severity IV—Violations involving for example:

1. Exposures in excess of the limits of 10 CFR 20.101 not constituting Severity Level I, II, or III violations;
2. A radiation level in an unrestricted area such that an individual could receive greater than 2 millirem in a one-hour period or 100 millirem in any seven consecutive days;
3. Failure to make a 30-day notification required by 10 CFR 20.405;
4. Failure to make a followup written report as required by 10 CFR 20.402(b), 20.408, and 20.409; or
5. Any other matter that has more than minor safety or environmental significance.

E. Severity V—Violations that have minor safety or environmental significance.

SUPPLEMENT V—SEVERITY CATEGORIES

Transportation[16]

A. Severity I—Violations of NRC transportation requirements involving for example:

1. Annual whole body radiation exposure of a member of the public in excess of 2.5 rems of radiation;
2. Surface contamination in excess of 50 times the NRC limit; or
3. External radiation levels in excess of 10 times the NRC limit.

B. Severity II—Violations of NRC transportation requirements involving for example:

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[16] Some transporation requirements are applied to more than one licensee involved in the same activity such as a shipper and a carrier. When a violation of such a requirement occurs, enforcement action will be directed against the responsible licensee which, under the circumstances of the case, may be one or more of the licensees involved.

1. Annual whole body exposure of a member of the public in excess of 0.5 rems of radiation;

2. Surface contamination in excess of 10, but not more than 50 times the NRC limit;

3. External radiation levels in excess of five, but not more than 10 times the NRC limit; or

4. Failure to make required initial notifications associated with Severity Level I or II violations.

C. Severity III—Violations of NRC transportation requirements involving for example:

1. Surface contamination in excess of five but not more than 10 times the NRC limit;

2. External radiation in excess of one but not more than five times the NRC limit;

3. Any noncompliance with labeling, placarding, shipping paper, packaging, loading, or other requirements that could reasonably result in the following:

a. Significant failure to identify the type, quantity, or form of material;

b. Failure of the carrier or recipient to exercise adequate controls; or

c. Substantial potential for personnel exposure or contamination, or improper transfer of material;

4. Failure to make required initial notification associated with Severity Level III violations; or

5. Breakdown in the licensee's program for the transportation of licensed material involving a number of violations that are related or, if isolated, that are recurring violations that collectively reflect a potentially significant lack of attention or carelessness toward licensed responsibilities.

D. Severity IV—Violations of NRC transportation requirements involving for example:

1. Breach of package integrity without external radiation levels exceeding the NRC limit or without contamination levels exceeding five times the NRC limits;

2. Surface contamination in excess of but not more than five times the NRC limit;

3. Failure to register as an authorized user of an NRC-Certified Transport packages;

4. Noncompliance with shipping papers, marking, labeling, placarding packaging or loading not amounting to a Severity Level I, II, or III violation;

5. Failure to demonstrate that packages for special form radioactive material meets applicable regulatory requirements;

6. Failure to demonstrate that packages meet DOT Specifications for 7A Type A packages; or

7. Other violations that have more than minor safety or environmental significance.

E. Severity V—Violations that have minor safety or environmental significance.

SUPPLEMENT VI—SEVERITY CATEGORIES

Fuel Cycle and Materials Operations

A. Severity I—Violations involving for example:

1. Radiation levels, contamination levels, or releases that exceed 10 times the limits specified in the license;

2. A system designed to prevent or mitigate a serious safety event not being operable when actually required to perform its design function; or

3. A nuclear criticality accident.

B. Severity II—Violations involving for example:

1. Radiation levels, contamination levels, or releases that exceed five times the limits specified in the license; or

2. A system designed to prevent or mitigate a serious safety event being inoperable.

C. Severity III—Violations involving for example:

1. Failure to control access to licensed materials for radiation purposes as specified by NRC requirements;

2. Possession or use of unauthorized equipment or materials in the conduct of licensee activities which degrades safety;

3. Use of radioactive material on humans where such use is not authorized;

4. Conduct of licensed activities by a technically unqualified person;

5. Radiation levels, contamination levels, or releases that exceed the limits specified in the license;

6. Medical therapeutic misadministration or the failure to report such misadministration;

7. Multiple errors of the same or similar root cause that results in diagnostic misadministrations over the inspection period, or a recurrent violation from the previous inspection period that results in a diagnostic misadministration; or

8. Breakdown in the control of licensed activities involving a number of violations that are related or, if isolated, that are recurring violations that collectively represent a potentially significant lack of attention or carelessness toward licensed responsibilities.

9. Failure, during radiographic operations, to have present or use radiographic equipment, radiation survey instruments, and/or personnel monitoring devices as required by part 34.

D. Severity IV—Violations involving for example:

1. Failure to maintain patients hospitalized who have cobalt-60, cesium-137, or iridium-192 implants or to conduct required leakage or contamination tests, or to use properly calibrated equipment;

2. Other violations that have more than minor safety or environmental significance; or

3. Medical diagnostic misadministration or a failure to report such a misadministration.

E. Severity V—Violations that have minor safety or environmental significance.

SUPPLEMENT VII—SEVERITY CATEGORIES

Miscellaneous Matters

A. Severity I—Violations involving for example:

1. Inaccurate or incomplete information[17] that is provided to the NRC (a) deliberately with the knowledge of a license official that the information is incomplete or inaccurate, or (b) if the information, had it been complete and accurate at the time provided, likely would have resulted in regulatory action such as an immediate order required by the public health and safety.

2. Incomplete or inaccurate information that the NRC requires be kept by a licensee which is (a) incomplete or inaccurate because of falsification by or with the knowledge of a licensee official, or (b) if the information, had it been complete and accurate when reviewed by the NRC, likely would have resulted in regulatory action such as an immediate order required by public health and safety considerations;

3. Information that the licensee has identified as having significant implications for public health and safety or the common defense and security ("significant information identified by a licensee") and is deliberately withheld from the Commission;

4. Action by senior corporate management in violation of 10 CFR 50.7 or similar regulations against an employee; or

5. A knowing and intentional failure to provide the notice required by Part 21.

6. Failure to substantially implement the required fitness-for-duty program.[18]

B. Severity II—Violations involving for example:

1. Inaccurate or incomplete information which is provided to the NRC (a) by a licensee official because of careless disregard for the completeness or accuracy of the information, or (b) if the information, had it been complete and accurate at the time provided, likely would have resulted in regulatory action such as a show cause order or a different regulatory position;

2. Incomplete or inaccurate information which the NRC requires be kept by a licensee which is (a) incomplete or inaccurate because of careless disregard for the accuracy of the information on the part of a licensee official, or (b) if the information, had it been complete and accurate when reviewed by the NRC, likely would have resulted in regulatory action such as a show cause order or a different regulatory position;

3. "Significant information identified by a licensee" and not provided to the Commission because of careless disregard on the part of a licensee official;

4. Action by plant management above first-line supervision in violation of 10 CFR 50.7 or similar regulations against an employee; or

5. A failure to provide the notice required by Part 21.

6. Failure to remove an individual from unescorted access who has been involved in the sale, use, or possession of illegal drugs within the protected area or to take action for on duty misuse of alcohol, prescription drugs, or over-the-counter drugs;

7. Failure to test for cause when observed behavior within the protected area or credible information concerning activities within the protected area indicates possible unfitness for duty based on drug or alcohol use; or

8. Deliberate failure of the licensee's Employee Assistance Program to notify licensee's management when EAP's staff is aware that an individual's condition may adversely affect safety related activities.

C. Severity III—Violations involving for example:

1. Incomplete or inaccurate information which is provided to the NRC (a) because of inadequate actions on the part of licensee officials but not amounting to a Severity Level I or II violation, or (b) if the information, had it been complete and accurate at the time provided, likely would have resulted in a reconsideration of a regulatory position or substantial further inquiry such as an additional inspection or a formal request for information;

2. Incomplete or inaccurate information which the NRC requires be kept by a licensee which is (a) incomplete or inaccurate because of inadequate actions on the part of licensee officials but not amounting to a Severity Level I or II violation, or (b) if the information, had it been complete and accurate when reviewed by the NRC, likely would have resulted in a reconsideration of a regulatory position or substantial further inquiry such as an additional inspection or a formal request for information;

3. Failure to provide "significant information identified by a licensee" to the Commission and not amounting to a Severity Level I or II violation;

4. Action by first-line supervision in violation of 10 CFR 50.7 or similar regulations against an employee; or

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[17] In applying the examples in this supplement regarding inaccurate or incomplete information and records, reference also should be made to the guidance in Section VI.

[18] The examples for violations for fitness-for-duty relate to violations of 10 CFR Part 26.

5. Inadequate review or failure to review such that, if an appropriate review had been made as required, a Part 21 report would have been made.

6. Failure to complete a suitable inquiry on the basis of 10 CFR Part 26, keep records concerning the denial of access, or respond to inquiries concerning such denials such that, as a result of the failure, a person previously denied access for fitness-for-duty reasons was improperly granted access;

7. Failure to take the required action for a person confirmed to have been tested positive for illegal drug use or take action for onsite alcohol use; not amounting to a Severity Level II violation;

8. Failure to assure, as required, that contractors or vendors have an effective fitness-for-duty program; or

9. Breakdown in the fitness-for-duty program involving a number of violations of the basic elements of the fitness-for-duty program that collectively reflect a significant lack of attention or carelessness towards meeting the objectives of 10 CFR 26.10.

D. Severity IV—Violations involving for example:

1. Incomplete or inaccurate information of more than minor significance which is provided to the NRC but not amounting to a Severity Level I, II, or III violation;

2. Information which the NRC requires be kept by a licensee and which is incomplete or inaccurate and of more than minor significance but not amounting to a Severity Level I, II, or III violation; or

3. Inadequate review or failure to review under Part 21 or other procedural violations associated with Part 21 with more than minor safety significance.

4. Isolated failures to meet basic elements of the fitness-for-duty program not involving a Severity Level I, II, or III violation.

5. Failure to report acts of licensed operators or supervisors pursuant to 10 CFR 26.73.

E. Severity V—Violations of minor procedural requirements of Part 21.

1. Incomplete or inaccurate information which is provided to the Commission and the incompleteness or inaccuracy is of minor significance;

2. Information which the NRC requires be kept by a licensee which is incomplete or inaccurate and the incompleteness or inaccuracy is of minor significance; or

3. Minor procedural requirements of Part 21.

4. Minor violations of fitness-for-duty requirements.

SUPPLEMENT VIII—SEVERITY CATEGORIES

Emergency Preparedness

A. Severity I—Violations involving for example:

In a general emergency, licensee failure to promptly (1) correctly classify the event, (2) make required notifications to responsible Federal, State, and local agencies, or (3) respond to the event (e.g., assess actual or potential offsite consequences, activate emergency response facilities, and augment shift staff).

B. Severity II—Violations involving for example:

1. In a site area emergency, licensee failure to promptly (1) correctly classify the event, (2) make required notifications to repsonsible Federal, State, and local agencies, or (3) respond to the event (e.g., assess actual or potential offsite consequences, activate emergency response facilities, and augment shift staff); or

2. Licensee failure to meet or implement more than one emergency planning standard involving assessment or notification.

C. Severity III—Violations involving for example:

1. In an alert, licensee failure to promptly (1) correctly classify the event, (2) make required notifications to responsible Federal, State, and local agencies, or (3) respond to the event (e.g., assess actual or potential offsite consequences, activate emergency response facilities, and augment shift staff); or

2. Licensee failure to meet or implement one emergency planning standard involving assessment or notification.

D. Severity IV—Violations involving for example:

Licensee failure to meet or implement any emergency planning standard or requirement not directly related to assessment and notification.

E. Severity V—Violations that have minor safety or environmental significance.

[53 FR 40022, Oct. 13, 1988, as amended at 53 FR 45451, Nov. 10, 1988; 53 FR 47662, Nov. 25, 1988; 54 FR 24494, June 7, 1989; 54 FR 50611, Dec. 8, 1989; 54 FR 53315, Dec. 28, 1989; 55 FR 852, Jan. 10, 1990]

EFFECTIVE DATE NOTE: At 55 FR 852, Jan. 10, 1990, appendix C, supplement VI, was amended by adding example 9 to paragraph C, effective January 10, 1991.

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APPENDIX A—FEDERAL FINANCIAL ASSISTANCE TO WHICH THIS PART APPLIES

AUTHORITY: Sec. 161, 68 Stat. 948, as amended (42 U.S.C. 2201); sec. 274, 73 Stat. 688, as amended (42 U.S.C. 2021); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841).

Subpart A also issued under secs. 602-605, Pub. L. 88-352, 78 Stat. 252, 253 (42 U.S.C. 2000d-1-2000d-4); sec. 401, 88 Stat. 1254 (42 U.S.C. 5891).

Subpart B also issued under sec. 504, Pub. L. 93-112, 87 Stat. 394 (29 U.S.C. 706); sec. 119, Pub. L. 95-602, 92 Stat. 2984 (29 U.S.C. 794); sec. 122, Pub. L. 95-602, 92 Stat. 2984 (29 U.S.C. 706(6)).

Subpart C also issued under Title III of Pub. L. 94-135, 89 Stat. 728, as amended (42 U.S.C. 6101).

Subpart E also issued under 29 U.S.C. 794.

SOURCE: 29 FR 19277, Dec. 31, 1964, unless otherwise noted.

GENERAL PROVISIONS

§ 4.1 Purpose and scope.

The regulations in this part implement:

(a) The provisions of Title VI of the Civil Rights Act of 1964, Pub. L. 88-352; (78 Stat. 241; 42 U.S.C. 2000d note), and Title IV of the Energy Reorganization Act of 1974, Pub. L. 93-438, (88 Stat. 1233; 42 U.S.C. 5801 note), which relate to nondiscrimination with respect to race, color, national origin or sex in any program or activity receiving Federal financial assistance from NRC;

(b) The provisions of section 504 of the Rehabilitation Act of 1973, as amended, Pub. L. 93-112 (87 Stat. 355; 29 U.S.C. 701 note), Pub. L. 95-602 (92 Stat. 2955; 29 U.S.C. 701 note), which relates to nondiscrimination with respect to the handicapped in any program or activity receiving Federal financial assistance; and

(c) The provisions of the Age Discrimination Act of 1975, as amended Pub. L. 94-135 (89 Stat. 713; 42 U.S.C. 3001 note), Pub. L. 95-478 (92 Stat. 1513; 42 U.S.C. 3001 note), which relates to nondiscrimiantion on the basis of age in any program or activity receiving Federal financial assistance.

[52 FR 25357, July 7, 1987]

§ 4.2 Subparts.

Subpart A sets forth rules applicable to Title VI of the Civil Rights Act of 1964 and Title IV of the Energy Reorganization Act of 1974. (The Acts are collectively referred to in Subpart A as "the Act".) Subpart B sets forth rules applicable specifically to matters pertaining to section 504 of the Rehabilitation Act of 1973, as amended. Subpart C sets forth rules pertaining to the provisions of the Age Discrimination Act of 1975, as amended, Pub. L. 94-135 (89 Stat. 713; 42 U.S.C. 3001 note), Pub. L. 95-478 (92 Stat. 1513; 42 U.S.C. 3001 note), which relates to nondiscrimination on the basis of age in any program or activity receiving Federal financial assistance.

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[52 FR 25358, July 7, 1987]

§ 4.3 Application of this part.

This part applies to any program for which Federal financial assistance is authorized under a law administered by NRC. The programs to which this part applies are listed in Appendix A of this part; Appendix A may be revised from time to time by notice published in the FEDERAL REGISTER. This part applies to money paid, property transferred, or other Federal assistance extended under any program or activity, by way of grant, entitlement, cooperative agreement, loan, contract, or other agreement by NRC, or an authorized contractor or subcontractor of NRC, the terms of which require compliance with this part. If any statutes implemented by this part are otherwise applicable, the failure to list a program in Appendix A does not mean the program is not covered by this part. This part does not apply to—

(a) Contracts of insurance or guaranty; or

(b) Procurement contracts; or

(c) Employment practices under any program or activity except as provided in §§ 4.13, 4.122 and 4.302.

[52 FR 25358, July 7, 1987]

§ 4.4 Definitions.

(a) "Applicant" means one who submits an application, request, or plan required to be approved by NRC, or by a primary recipient, as a condition to eligibility for Federal financial assistance; "application" means such an application, request, or plan.

(b) "Commission" means the Commission of five members or a quorum thereof sitting as a body; "NRC" means the Nuclear Regulatory Commission and its duly authorized representatives.

(c) "Facility" includes all or any portion of structures, equipment, or other real or personal property or interests therein, and the provisions of facilities includes the construction, expansion, renovation, remodeling, alteration or acquisition of facilities.

(d) "Federal financial assistance" means any grant, entitlement, loan, cooperative agreement, contract (other than a procurement contract or a contract of insurance or guaranty), or any other arrangement by which NRC provides or otherwise makes available assistance in the form of—

(1) Funds;

(2) Services of Federal personnel or other personnel at Federal expense; or

(3) Real and personal property or any interest in or use of property, including—

(i) Transfers or leases of property for less than fair market value or for reduced consideration;

(ii) Proceeds from a subsequent transfer or lease of property if the Federal share of its fair market value is not returned to the Federal Government; and the

(iii) Sale and lease of, and the permission to use (other than on casual or transient basis) Federal property or any interest in such property without consideration or at a nominal consideration, or at a consideration which is reduced for the purpose of assisting the recipient, or in recognition of the public interest to be served by such sale or lease to the recipient.

(e) "Administrative Law Judge" means an individual appointed pursuant to section 11 of the Administrative Procedure Act to conduct proceedings subject to this part.

(f) "Primary recipient" means any recipient which is authorized or required to extend Federal financial assistance to another recipient for the purpose of carrying out a program.

(g) "Program" includes any program, project, or activity designated in Appendix A of this part for the provision of services, financial aid, or other benefits to individuals (including education or training) whether provided through employees of the recipient or provided by others through contracts or other arrangements with the recipient, and including work opportunities and cash or loan or other assistance to individuals, or for the provision of facilities for furnishing services, financial aid or other benefits to individuals. The services, financial aid, or other benefits provided under a program receiving Federal financial assistance shall be deemed to include any services, financial aid, or other benefits provided with the aid of Federal financial assistance or with the aid of any non-Federal funds, property, or other resources required to be extended or made available for the program to meet matching requirements or other conditions which must be met in order to receive the Federal financial assistance, and to include any services, financial aid, or other benefits provided in or through a facility provided with the aid of Federal financial assistance or such non-Federal resources.

(h) "Recipient" means any State, political subdivision of any State, or instrumentality of any State or political subdivision, any public or private agency, institution, or organization, or other entity, or any individual, in any State, to whom Federal financial assistance is extended, directly or through another recipient, for any program, including any successor, assignee, or transferee thereof, but such term does not include any ultimate beneficiary under any such program.

(i) "Responsible NRC official" means the Director of the Office of Equal Employment Opportunity or any other officer to whom the Executive Director for Operations has delegated the authority to act.

(j) "United States" means the States of the United States, the District of Columbia, Puerto Rico, the Virgin Islands, American Samoa, Guam, Wake Island, and the territories and possessions of the United States, and the term "State" means any one of the foregoing.

[29 FR 19277, Dec. 31, 1964, as amended at 45 FR 14535, Mar. 6, 1980; 45 FR 18905, Mar. 24, 1980. Redesignated and amended at 52 FR 25358, July 7, 1987]

§ 4.5 Communications and reports.

Except as otherwise indicated, all communications and reports relating to this part should be addressed to the U.S. Nuclear Regulatory Commission, Washington, DC 20555. Communications and reports may be delivered in person to the Commission's offices at 1717 H Street, NW., Washington, DC, or at 11555 Rockville Pike, Rockville, Maryland.

[53 FR 6138, Mar. 1, 1988]

§ 4.6 Maintenance of records.

Each record required by this part must be legible throughout the retention period specified by each Commission regulation. The record may be the original or a reproduced copy or a microform provided that the copy or microform is authenticated by authorized personnel and that the microform is capable of producing a clear copy throughout the required retention period. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records such as letters, drawings, specifications, must include all pertinent information such as stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.

[53 FR 19244, May 27, 1988]

§ 4.8 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). OMB has approved the information collection requirements contained in this part under control number 3150-0053.

(b) The approved information collection requirements contained in this part appear in §§ 4.32, 4.34, 4.125, 4.127, 4.231, and 4.232.

[49 FR 19623, May 9, 1984]

Subpart A—Regulations Implementing Title VI of the Civil Rights Act of 1964 and Title IV of the Energy Reorganization Act of 1974

DISCRIMINATION PROHIBITED

§ 4.11 General prohibition.

No person in the United States shall, on the ground of sex, race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program to which this subpart applies.

[29 FR 19277, Dec. 31, 1964, as amended at 40 FR 8778, Mar. 3, 1975]

§ 4.12 Specific discriminatory actions prohibited.

(a) A recipient under any program to which this subpart applies may not, directly or through contractual or other arrangements, on the ground of sex, race, color, or national origin:

(1) Deny an individual any service, financial aid, or other benefit provided under the program;

(2) Provide any service, financial aid, or other benefit to an individual which is different, or is provided in a different manner, from that provided to others under the program;

(3) Subject an individual to segregation or separate treatment in any matter related to his receipt of any service, financial aid, or other benefit under the program;

(4) Restrict an individual in any way in the enjoyment of any advantage or privilege enjoyed by others receiving any service, financial aid, or other benefit under the program;

(5) Treat an individual differently from others in determining whether he satisfies any admission, enrollment, quota, eligibilty, membership or other requirement or condition which individuals must meet in order to be provided any service, financial aid, or other benefit provided under the program;

(6) Deny an individual an opportunity to participate in the program through the provision of services or otherwise or afford him an opportunity to do so which is different from that afforded others under the program (including the opportunity to participate in the program as an employee but only to the extent set forth in § 4.13).

(b) A recipient in determining the types of services, financial aid, or other benefits, or facilities which will be provided under any such program, or the class of individuals to whom, or the situations in which, such services, financial aid, other benefits, or facilities will be provided under any such program, or the class of individuals to be afforded an opportunity to participate in any such program, may not, directly or through contractual or other arrangements, utilize criteria or methods of administration which have the effect of subjecting individuals to discrimination because of their sex, race, color, or national origin, or have the effect of defeating or substantially impairing accomplishment of the objectives of the program as respects individuals of a particular sex, race, color, or national origin.

(c) In determining the site or location of facilities, a recipient or applicant may not make selections with the purpose or effect of excluding individuals from, denying them the benefits of, or subjecting them to discrimination under any program to which this subpart applies, on the grounds of sex, race, color, or national origin; or with the purpose or effect of defeating or substantially impairing the accomplishment of the objectives of the Act or this subpart.

(d) As used in this section the services, financial aid, or other benefits provided under a program receiving Federal financial assistance shall be deemed to include any services, financial aid, or other benefit provided in or through a facility provided with the aid of Federal financial assistance.

(e) The enumeration of specific forms of prohibited discrimination in this section and § 4.13 does not limit the generality of the prohibition in § 4.11.

(f) This subpart does not prohibit the consideration of sex, race, color, or national origin if the purpose and effect are to remove or overcome the consequences of practices or impediments which have restricted the availability of, or participation in, the program or activity receiving Federal financial assistance, on the grounds of sex, race, color or national origin. Where previous discriminatory practice or usage tends, on the grounds of sex, race, color, or national origin, to exclude individuals from participation in, to deny them the benefits of, or to subject them to discrimination under any program or activity to which this subpart applies, the applicant or recipient has an obligation to take reasonable action to remove or overcome the consequences of the prior discriminatory practice or usage, and to accomplish the purposes of the Act.

[29 FR 19277, Dec. 31, 1964, as amended at 38 FR 17927, July 5, 1973; 40 FR 8778 Mar. 3, 1975]

§ 4.13 Employment practices.

(a) Where a primary objective of a program of Federal financial assistance to which this subpart applies is to provide employment, a recipient may not, directly or through contractual or other arrangements, subject an individual to discrimination on the ground of sex, race, color, or national origin in its employment practices under such program (including recruitment or recruitment advertising, employment, layoff or termination, upgrading, demotion, or transfer, rates of pay or other forms of compensation, and use of facilities), including programs where a primary objective of the Federal financial assistance is (1) to assist such individuals through employment to meet expenses incident to the commencement or continuation of their education or training, or (2) to provide work experience which contributes to the education or training of such individuals. (Examples of such programs are nuclear training equipment grants, grants and loans of materials for training, and fellowship programs.) The requirements applicable to construction employment under any such program shall be those specified in or pursuant to Part III of Executive Order 11246 or any Executive order which supersedes it.

(b) Where a primary objective of the Federal financial assistance is not to provide employment, but discrimination on the grounds of sex, race, color, or national origin in the employment practices of the recipient or other persons subject to this subpart tends, on the grounds of sex, race, color, or national origin, to exclude individuals from participation in, to deny them the benefits of, or to subject them to discrimination under any program to which this subpart applies, the provisions of paragraph (a) of this section shall apply to the employment practices of the recipient or other persons subject to this subpart to the extent necessary to assure equality of opportunity to, and nondiscriminatory treatment of, beneficiaries.

[38 FR 17927, July 5, 1973, as amended at 40 FR 8778, Mar. 3, 1975]

§ 4.14 Medical emergencies.

A recipient shall not be deemed to have failed to comply with § 4.11 if immediate provision of a service or other benefit to an individual is necessary to prevent his death or serious impairment of his health, and such service or other benefit cannot be provided except by or through a medical institution which refuses or fails to comply with § 4.11.

ASSURANCE REQUIRED

§ 4.21 General requirements.

(a) Every grant, loan or contract under a program to which this subpart applies, except a program to which § 4.22 applies, shall, as a condition to its approval by NRC, or by the appropriate NRC contractor or subcontractor, and the extension of any Federal financial assistance pursuant thereto, contain or be accompanied by an assurance that the program will be conducted in compliance with all requirements imposed by or pursuant to this subpart. In the case of a grant, loan, or contract involving Federal financial assistance to provide real property or structures thereon, the assurance shall obligate the recipient, or, in the case of a subsequent transfer, the transferee, for the period during which the real property or structures are used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits. In the case of personal property the assurance shall obligate the recipient for the period during which he retains ownership or possession of the property. In all other cases the assurance shall obligate the recipient for the period during which Federal financial assistance is extended pursuant to the grant, loan or contract. The Commission will specify the form of the foregoing assurances for each program and the extent to which like assurances will be required of subgrantees, contractors and subcontractors, suc cessors in interest, and other participants in the program. Any such assurance shall include provisions which give the United States a right to seek its judicial enforcement.

(b) In the case of real property, structures or improvements thereon, or interests therein, which was acquired with Federal financial assistance, or in the case where Federal financial assistance is provided in the form of a transfer of real property or interest therein from the Federal Government, the instrument effecting or recording the transfer shall contain a covenant running with the land assuring nondiscrimination for the period during which the real property is used for a purpose for which the Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits. Where no transfer of property is involved, but property is improved with Federal financial assistance, the recipient shall agree to include such a covenant in any subsequent transfer of such property. Where the property is obtained from the Federal Government, such convenant may also include a condition coupled with a right to be reserved by the NRC to revert title to the property in the event of a breach of the covenant where, in the discretion of the NRC, such a condition and right of reverter is appropriate to the program and to the nature of the grant and the grantee. In such event if a transferee of real property proposes to mortgage or otherwise encumber the real property as security for financing construction of new, or improvement of existing, facilities on such property for the purposes for which the property was transferred, the NRC may agree, upon request of the transferee and if necessary to accomplish such financing, and upon such conditions as the NRC deems appropriate, to forbear the exercise of such right to revert title for so long as the lien of such mortgage or other encumbrance remains effective.

(c) Transfer of surplus property are subject to regulations issued by the Administrator of General Services (41 CFR 101-6.2).

[29 FR 19277, Dec. 31, 1964, as amended at 38 FR 17927, July 5, 1973]

§ 4.22 Continuing State programs.

Every application by a State or a State agency for continuing Federal financial assistance shall require the submission of and every grant, loan, or contract to or with a State or a State agency to carry out a program involving continuing Federal financial assistance to which this subpart applies, shall, as a condition to its approval and the extension of any Federal financial assistance pursuant to the grant, loan or contract, contain or be accompanied by, a statement that the program is (or, in the case of a new program, will be) conducted in compliance with all requirements imposed by or pursuant to this subpart, and shall provide or be accompanied by provisions for such methods of administration for the program as are found by the responsible NRC official to give reasonable assurance that the recipient and all other recipients of Federal financial assistance under such program will comply with all requirements imposed by or pursuant to this subpart.

[38 FR 17928, July 5, 1973]

§ 4.24 Assurances from institutions.

(a) In the case of a grant, loan or contract involving Federal financial assistance to an institution of higher education, the assurance required by § 4.21 shall extend to admission practices and to all other practices relating to the treatment of students.

(b) The assurance required with respect to an institution of higher education, hospital, or any other institution, insofar as the assurance relates to the institution's practices with respect to admission or other treatment of individuals as students, patients, or clients of the institution or to the opportunity to participate in the provision of services or other benefits to such individuals, shall be applicable to the entire institution unless the institution establishes, to the satisfaction of the responsible NRC official, that the institution's practices in designated parts or programs of the institution will in no way affect its practices in the program of the institution for which Federal financial assistance is sought, of the beneficiaries of or participants in such program. If in any such case the assistance sought is for the construction of a facility or part of a facility, the assurance shall in any event extend to the entire facility and to facilities operated in connection therewith.

COMPLIANCE INFORMATION

§ 4.31 Cooperation and assistance.

The responsible NRC official shall to the fullest extent practicable seek the cooperation of recipients in obtaining compliance with this subpart and shall provide assistance and guidance to recipients to help them comply voluntarily with this subpart.

§ 4.32 Compliance reports.

(a) Each recipient shall keep records and submit to the responsible NRC official, timely, complete, and accurate compliance reports at the times and in the form and containing the information that the responsible NRC official may determine to be necessary to enable the official to ascertain whether the recipient has complied or is complying with this subpart.

(b) In the case of any program under which a primary recipient extends Federal financial assistance to any other recipient, the other recipient shall also submit necessary compliance reports to the primary recipient to enable the primary recipient to carry out its obligations under this subpart.

(c) The primary recipient shall retain each record of information needed to complete a compliance report pursuant to paragraph (a) of this section for three years or as long as the primary recipient retains the status of primary recipient as defined in § 4.4, whichever is shorter.

[53 FR 19244, May 27, 1988]

§ 4.33 Access to sources of information.

Each recipient shall permit access by the responsible NRC official during normal business hours to such of its books, records, accounts, and other sources of information, and its facilities as may be pertinent to ascertain compliance with this subpart. Where any information required of a recipient is in the exclusive possession of any other agency, institution or person and that agency, institution or person shall fail or refuse to furnish this information, the recipient shall so certify in its report and shall set forth what efforts it has made to obtain the information.

§ 4.34 Information to beneficiaries and participants.

Each recipient shall make available to participants, beneficiaries, and other interested persons such information regarding the provisions of this subpart and its applicability to the program under which the recipient receives Federal financial assistance, and make such information available to them in such manner, as the responsible NRC official finds necessary to apprise such persons of the protections against discrimination assured them by the Act and this subpart.

CONDUCT OF INVESTIGATIONS

§ 4.41 Periodic compliance reviews.

The responsible NRC official shall from time to time review the practices of recipients to determine whether they are complying with this subpart.

§ 4.42 Complaints.

Any person who believes himself or any specific class of individuals to be subjected to discrimination prohibited by this subpart may by himself or by a representative file with the responsible NRC official a written complaint. A complaint must be filed not later than ninety (90) days from the date of the alleged discrimination, unless the time for filing is extended by the responsible NRC official. A complaint shall be signed by the complainant or his representative.

§ 4.43 Investigations.

The responsible NRC official will make a prompt investigation whenever a compliance review, report, complaint, or any other information indicates a possible failure to comply with this subpart. The investigation should include, where appropriate, a review of the pertinent practices and policies of the recipient, the circumstances under which the possible noncompliance with this subpart occurred, and other factors relevant to a determination as to whether the recipient has failed to comply with this subpart.

§ 4.44 Resolution of matters.

(a) If an investigation pursuant to § 4.43 indicates a failure to comply with this subpart, the responsible NRC official will so inform the recipient and the matter will be resolved by voluntary means whenever possible. If it has been determined that the matter cannot be resolved by voluntary means, action will be taken as provided for in §§ 4.46 through 4.49.

(b) If an investigation does not warrant action pursuant to paragraph (a) of this section, the responsible NRC official will so inform the recipient and the complainant, if any, in writing.

§ 4.45 Intimidatory or retaliatory acts prohibited.

No recipient or other person shall intimidate, threaten, coerce, or discriminate against any individual for the purpose of interfering with any right or privilege secured by the Act or this subpart, or because he has made a complaint, testified, assisted, or participated in any manner in an investigation, proceeding, or hearing under this subpart. The identity of complainants shall be kept confidential, except to the extent necessary to carry out the purposes of this subpart including the conduct of any investigation, hearing, or judicial proceeding arising thereunder.

[29 FR 19277, Dec. 31, 1964, as amended at 40 FR 8778, Mar. 3, 1975]

MEANS OF EFFECTING COMPLIANCE

§ 4.46 Means available.

If there appears to be a failure or threatened failure to comply with any of the provisions of this subpart, and if the noncompliance or threatened noncompliance cannot be corrected by informal means, compliance with this subpart may be effected by the suspension or termination of or refusal to grant or to continue Federal financial assistance or by any other means authorized by law. Such other means may include, but are not limited to: (a) A reference to the Department of Justice with a recommendation that appropriate proceedings be brought to enforce any rights of the United States under any law of the United States (including other titles of the Act), or any assurance or other contractual undertaking, and (b) any applicable proceeding under State or local law.

§ 4.47 Noncompliance with § 4.21.

If an applicant fails or refuses to furnish an assurance required under § 4.21 or otherwise fails or refuses to comply with a requirement imposed by or pursuant to that section, Federal financial assistance may be refused in accordance with the procedures of § 4.48.

[45 FR 14535, Mar. 6, 1980]

§ 4.48 Termination of or refusal to grant or to continue Federal financial assistance.

No order suspending, terminating, or refusing to grant or continue Federal financial assistance shall become effective until: (a) The responsible NRC official has advised the applicant or recipient of his failure to comply and has determined that compliance cannot be secured by voluntary means, (b) there has been an express finding on the record, after opportunity for hearing, of a failure by the applicant or recipient to comply with the requirement imposed by or pursuant to this subpart, (c) the action has been approved by the Commission pursuant to § 4.72, and (d) the expiration of thirty (30) days after the Commission has filed with the committee of the House and the committee of the Senate having legislative jurisdiction over the program involved, a full written report of the circumstances and the grounds for such action. Any action to suspend or terminate or to refuse to grant or to continue Federal financial assistance shall be limited to the particular political entity, or part thereof, or other applicant or recipient as to whom such finding has been made and shall be limited in its effect to the particular program, or part thereof, in which such noncompliance has been so found.

§ 4.49 Other means authorized by law.

No action to effect compliance by any other means authorized by law shall be taken until: (a) The responsible NRC official has determined that compliance cannot be secured by voluntary means, (b) the recipient or other person has been notified of its failure to comply and of the action to be taken to effect compliance, and (c) the expiration of at least ten (10) days from the mailing of such notice to the recipient or other person. During this period of at least ten (10) days, additional efforts shall be made to persuade the recipient or other person to comply with this subpart and to take such corrective action as may be appropriate.

[38 FR 17928, July 5, 1973]

OPPORTUNITY FOR HEARING

§ 4.51 Notice of opportunity for hearing.

(a) Whenever an opportunity for hearing is required by § 4.48, the responsible NRC official shall serve on the applicant or recipient, by registered or certified mail, return receipt requested, a notice of opportunity for hearing which will:

(1) Inform the applicant or recipient of his right within twenty (20) days of the date of the notice of opportunity for hearing, or such other period as may be specified in the notice, to request a hearing;

(2) Set forth the alleged item or items of noncompliance with this subpart;

(3) Specify the issues;

(4) State that compliance with this subpart may be effected by an order providing for the termination of or refusal to grant or to continue assistance, as appropriate, under the program involved; and

(5) Provide that the applicant or recipient may file a written answer to the notice of opportunity for hearing under oath or affirmation within twenty (20) days of its date, or such other period as may be specified in the notice.

(b) The applicant or recipient may respond to a notice of opportunity for hearing by filing a written answer under oath or affirmation. The answer shall specifically admit or deny each allegation, or, where the applicant or recipient does not have knowledge or information sufficient to form a belief, the answer may so state and the statements shall have the effect of a denial. Allegations of fact not denied shall be deemed to be admitted. The answe shall separately state and identify matters alleged as affirmative defenses and may also set forth the matters of fact and law on which the applicant or recipient relies. The answe may request a hearing.

(c) If the answer requests a hearing the Commission will issue a notice o hearing specifying:

(1) The time, place, and natur thereof;

(2) The legal authority and jurisdiction under which the hearing is to b held; and

(3) The matters of fact and law asserted or to be considered. The tim and place of hearing will be fixed wit due regard for the convenience an necessity of the parties or their representatives and for the public interes An answer to a notice of hearing is no required.

(d) An applicant or recipient ma file an answer, and waive or fail to quest a hearing, without waiving th requirement for findings of fact an conclusions of law or the right to see Commission review in accordance wit the provisions of §§ 4.71 through 4.7 At the time an answer is filed the a plicant or recipient may also subm written information or argument fo the record if he does not request hearing.

(e) An answer or stipulation ma consent to the entry of an order substantially the form set forth in th notice of opportunity for hearin such order may be entered by the r sponsible Commission official. Th consent of the applicant or recipie to the entry of an order shall const tute a waiver by him of a right to: (A hearing under the Act and § 4.48, (findings of fact and conclusions of la and (3) seek Commission review.

(f) The failure of an applicant or r cipient to file an answer within th period prescribed, or, if he requests hearing, his failure to appear therefo shall constitute a waiver by him of right to: (1) A hearing under the A and § 4.48, (2) conclusions of law, and (3) seek Commission review. In the event of such waiver, the responsible NRC official may find the facts on the basis of the record available and enter an order in substantially the form set forth in the notice of opportunity for hearing.

(g) An order entered in accordance with paragraph (e) or (f) of this section shall constitute the final decision of the Commission, unless the Commission, on its own motion, within forty-five (45) days after entry of the order, issues its own decision, which shall then constitute the final decision of the Commission.

(h) A copy of an order entered by the responsible NRC official shall be mailed to tne applicant or recipient and to the complainant, if any.

(i) Nothing in this section shall be deemed to place the burden of proof on the applicant or recipient.

[29 FR 19277, Dec. 31, 1964, as amended at 38 FR 17928, July 5, 1973; 40 FR 8778, Mar. 3, 1975]

HEARINGS AND FINDINGS

§ 4.61 Presiding officer.

One or more members of the Commission or one or more administrative law judges appointed pursuant to section 3105 of Title 5 of the United States Code shall: (a) Preside at a hearing and (b) make findings of fact and conclusions of law if an applicant or recipient waives a hearing and submits written information or argument for the record in accordance with § 4.51(d).

[35 FR 11459, July 17, 1970]

§ 4.62 Right to counsel.

In all proceedings under §§ 4.51–4.81, the applicant or recipient and the responsible NRC official shall have the right to be represented by counsel. A notice of appearance shall be filed by counsel prior to participation in any such proceedings.

§ 4.63 Procedures, evidence, and record.

(a) The hearing, decision, and any administrative review thereof shall be conducted in conformity with 5 U.S.C. 554-557 (sections 5-8 of the Administrative Procedure Act), and in accordance with such procedures as are proper (and not inconsistent with §§ 4.61 through 4.64) relating to the conduct of the hearing, giving of notices subsequent to those provided for in § 4.51, taking of testimony, exhibits, arguments and briefs, requests for finding, and other related matters. Both the responsible NRC official and the applicant or recipient shall be entitled to introduce all relevant evidence on the issues as stated in the notice of hearing or as determined by the presiding officer at the outset of or during the hearing.

(b) Technical rules of evidence shall not apply to hearings conducted pursuant to this subpart, but rules or principles designed to assure production of the most credible evidence available and to subject testimony to test by cross-examination shall be applied where reasonably necessary by the presiding officer. The presiding officer may exclude irrelevant, immaterial, or unduly repetitious evidence. All documents and other evidence offered or taken for the record shall be open to examination by the parties and opportunity shall be given to refute facts and arguments advanced on either side of the issues. A transcript shall be made of the oral evidence except to the extent the substance thereof is stipulated for the record.

(c) Each decision made after a hearing has been held shall be based on the hearing record, and written findings of fact and conclusions of law shall be made.

(d) If an applicant or recipient waives a hearing and submits written information or argument for the record in accordance with § 4.51(d), written findings of fact and conclusions of law shall be made.

[29 FR 19277, Dec. 31, 1964, as amended at 35 FR 11459, July 17, 1970; 38 FR 17928, July 5, 1973]

§ 4.64 Consolidated or joint hearings.

In cases in which the same or related facts are asserted to constitute noncompliance with this subpart with respect to two or more programs to which this subpart applies or noncompliance with this subpart and the regulations of one or more other Federal departments or agencies issued under Title VI of the Civil Rights Act of 1964, the Commission may, by agreement with such other departments or agencies, where applicable, provide for the conduct of consolidated or joint hearings, and for the application to such hearings of rules of procedure not inconsistent with this subpart. Final decisions in such cases, insofar as programs subject to this subpart are concerned shall be made in accordance with § 4.72.

[29 FR 19277, Dec. 31, 1964, as amended at 40 FR 8778, Mar. 3, 1975]

DECISION AND NOTICE

§ 4.71 Initial decision or certification.

The officer designated:

(a) To preside at a hearing, or,

(b) To make findings of fact and conclusions of law if an applicant or recipient waives a hearing and submits written information or argument for the record in accordance with § 4.51(d), shall render an initial decision on the record, or, if the Commission so directs, shall certify the entire record to the Commission for decision, together with a recommended decision on the record. A copy of such initial decision, or of such certification and recommended decision, shall be mailed to the applicant or recipient.

§ 4.72 Exceptions and final decision.

(a) The applicant or recipient, within thirty (30) days of the mailing of an initial decision or a recommended decision, may file with the Commission his exceptions to such decision, with his reasons therefor.

(b) In the absence of exceptions to an initial decision, the Commission may, on its own motion within forty-five (45) days after the mailing of such initial decision, serve on the applicant or recipient a notice that the Commission will review the decision.

(c) Upon the filing of exceptions to an initial decision or of a notice of review, the Commission shall review such initial decision and issue its own decision on the record with its reasons therefor.

(d) In the absence of either exceptions to an initial decision or of a notice of review, such initial decision shall constitute the final decision of the Commission.

(e) Upon the filing of exceptions to a recommended decision, the Commission shall review such recommended decision and issue its own decision on the record with its reasons therefor.

(f) In the absence of exceptions to a recommended decision, the Commission shall review such recommended decision and issue its own decision on the record with its reasons therefor.

§ 4.73 Rulings required.

Each decision of a presiding officer or the Commission shall set forth the rulings on each finding, conclusion, or exception presented, and shall identify the requirement or requirements imposed by or pursuant to this subpart with which it is found that the applicant or recipient has failed to comply.

§ 4.74 Content of orders.

The final decision may provide for suspension or termination of, or refusal to grant or continue Federal financial assistance, in whole or in part, under the program involved, and may contain such terms, conditions, and other provisions as are consistent with and will effectuate the purposes of the Act and this subpart, including provisions designed to assure that no Federal financial assistance will thereafter be extended under such program to the applicant or recipient determined by such decision to be in default in its performance of an assurance given by it pursuant to this subpart, or to have otherwise failed to comply with this subpart, unless and until it corrects its noncompliance and satisfies the NRC that it will fully comply with this subpart. A copy of the final decision shall be mailed to the applicant or recipient and the complainant, if any.

§ 4.75 Post termination proceedings.

(a) An applicant or recipient adversely affected by an order issued under § 4.74 shall be restored to full eligibility to receive Federal financial assistance if it satisfies the terms and conditions of that order for such eligibility or if it brings itself into compliance with this subpart and provides reasonable assurance that it will fully comply with this subpart.

(b) Any applicant or recipient adversely affected by an order entered pursuant to § 4.74 may at any time request the responsible NRC official to restore fully its eligibility to receive Federal financial assistance. Any such request shall be supported by information showing that the applicant or recipient has met the requirements of paragraph (a) of this section. If the responsible NRC official determines that those requirements have been satisfied, he shall restore such eligibility.

(c) If the responsible NRC official denies any such request, the applicant or recipient may submit a request for a hearing in writing, specifying why it believes such official to have been in error. It shall thereupon be given an expeditious hearing, with the decision on the record, in accordance with rules of procedure issued by the responsible NRC official. The applicant or recipient will be restored to such eligibility if it proves at such a hearing that it satisfied the requirements of paragraph (a) of this section. While proceedings under this section are pending, the sanctions imposed by the order issued under § 4.74 shall remain in effect.

[38 FR 17928, July 5, 1973, as amended at 40 FR 8778, Mar. 3, 1975]

JUDICIAL REVIEW

§ 4.81 Judicial review.

Action taken pursuant to section 602 of the Civil Rights Act of 1964 is subject to judicial review as provided in section 603 of that Act.

[40 FR 8778, Mar. 3, 1975]

EFFECT ON OTHER REGULATIONS; FORMS AND INSTRUCTIONS

§ 4.91 Effect on other regulations.

All regulations, orders, or like directions heretofore issued by any officer of the NRC which impose requirements designed to prohibit any discrimination against individuals on the ground of sex, race, color, or national origin under any program to which this subpart applies, and which authorize the suspension or termination of or refusal to grant or to continue Federal financial assistance to any applicant for or recipient of such assistance under such program for failure to comply with such requirements, are hereby superseded to the extent that such discrimination is prohibited by this subpart, except that nothing in this subpart shall be deemed to relieve any person of any obligation assumed or imposed under any such superseded regulation, order, instruction, or like direction prior to the effective date of this subpart. Nothing in this subpart, however, shall be deemed to supersede any of the following (including future amendments thereof):

(a) Executive Orders 10925, 11114, and 11246 and regulations issued thereunder, or

(b) Executive Order 11063 and regulations issued thereunder and any other regulations or instructions insofar as such order, regulations or instructions prohibit discrimination on the ground of sex, race, color, or national origin in any program or situation to which this subpart is inapplicable, or prohibit discrimination on any other ground.

[29 FR 19277, Dec. 31, 1964, as amended at 38 FR 17928, July 5, 1973; 40 FR 8778, Mar. 3, 1975]

§ 4.92 Forms and instructions.

The responsible NRC official shall issue and promptly make available to interested persons forms and detailed instructions and procedures for effectuating this subpart as applied to programs to which this subpart applies and for which he is responsible.

§ 4.93 Supervision and coordination.

The Commission may from time to time assign to officials of other departments or agencies of the Government, with the consent of the department or agency involved, responsibilities in connection with the effectuation of the purposes of Title VI of the Civil Rights Act of 1964 and this subpart, other than responsibility for final decision as provided in § 4.72, including the achievement of effective coordination and maximum uniformity within the NRC and within the Executive Branch of the Government in the application of Title VI of the Civil Rights Act and this subpart to similar programs and in similar situations. Any action taken, determination made, or requirement imposed by an official of another department or agency acting pursuant to an assignment of responsibility under this section shall have the same effect as though such action had been taken by the responsible NRC official.

[40 FR 8778, Mar. 3, 1975]

Subpart B—Regulations Implementing Section 504 of the Rehabilitation Act of 1973, as amended

SOURCE: 45 FR 14535, Mar. 6, 1980, unless otherwise noted.

§ 4.101 Definitions.

As used in this subpart:

(a) "Handicapped person" means any person who has a physical or mental impairment that substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having such an impairment. Such term does not include any individual who is an alcoholic or drug abuser whose current use of alcohol or drugs prevents such individual from performing the duties of the job in question or whose employment, by reason of such current alcohol or drug abuse, would constitute a direct threat to property or the safety of others.

(b) As used in paragraph (a) of this section, the phrase:

(1) "Physical or mental impairment" means: (i) Any physiological disorder or condition, cosmetic disfigurement, or anatomical loss affecting one or more of the following body systems: Neurological; musculoskeletal; special sense organs; respiratory, including speech organs; cardiovascular; reproductive; digestive, genitourinary; hemic and lymphatic; skin; and endocrine; or (ii) any mental or psychological disorder, such as mental retardation, organic brain syndrome, emotional or mental illness, and specific learning disabilities. The term "physical or mental impairment" includes, but is not limited to, such diseases and conditions as orthopedic, visual, speech, and hearing impairments, cerebral palsy, epilepsy, muscular dystrophy, multiple sclerosis, cancer, heart disease, diabetes, mental retardation, and emotional illness.

(2) "Major life activities" means functions such as caring for one's self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working.

(3) "Has a record of such an impairment" means has a history of, or has been misclassified as having, a mental or physical impairment that substantially limits one or more major life activities.

(4) "Is regarded as having an impairment" means:

(i) Has a physical or mental impairment that does not substantially limit major life activities but is treated by a recipient as constituting such a limitation;

(ii) Has a physical or mental impairment that substantially limits major life activities only as a result of the attitudes of others toward such impairment; or

(iii) Does not have a physical or mental impairment but is treated by a recipient as having such an impairment.

(c) "Qualified handicapped person" means: (1) With respect to employment, a handicapped person who, with reasonable accommodation, can perform essential functions of the job in question and (2) with respect to services, a handicapped person who meets the essential eligibility requirements for the receipt of such services.

(d) "Section 504" means section 504 of the Rehabilitation Act of 1973, Pub. L. 93-112, as amended by the Rehabilitation, Comprehensive Services, and Developmental Disabilities Amendments of 1978, Pub. L. 95-602 (29 U.S.C. 794).

DISCRIMINATORY PRACTICES

§ 4.121 General prohibitions against discrimination.

(a) No qualified handicapped person, shall, on the basis of handicap, be excluded from participation in, be denied the benefits of, or otherwise be subject to discrimination under any program or activity that receives or benefits from Federal financial assistance.

(b)(1) A recipient, in providing any aid, benefit, or service, may not, directly or through contractual, licensing, or other arrangements, on the basis of handicap:

(i) Deny a qualified handicapped person the opportunity to participate in or benefit from the aid, benefit, or service;

(ii) Afford a qualified handicapped person an opportunity to participate in or benefit from the aid, benefit, or service that is not equal to that afforded others;

(iii) Provide a qualified handicapped person with an aid, benefit, or service that is not as effective in affording equal opportunity to obtain the same result, to gain the same benefit, or to reach the same level of achievement as that provided to others;

(iv) Provide different or separate aid, benefits, or services to handicapped persons or to any class of handicapped persons than is provided to others unless such action is necessary to provide qualified handicapped persons with aid, benefits, or services that are as effective as those provided to others;

(v) Aid or perpetuate discrimination against a qualified handicapped person by providing significant assistance to any agency, organization, or person that discriminates on the basis of handicap in providing any aid, benefit, or service to beneficiaries of the recipient's program;

(vi) Deny a qualified handicapped person the opportunity to participate as a member of planning or advisory boards; or

(vii) Otherwise limit a qualified handicapped person in the enjoyment of any right, privilege, advantage, or opportunity enjoyed by others receiving the aid, benefit, or service.

(2) A recipient may not deny a qualified handicapped person the opportunity to participate in programs or activities that are not separate or different, despite the existence of permissibly separate or different programs or activities.

(3) A recipient may not directly or through contractual or other arrangements, utilize criteria or methods of administration: (i) That have the effect of subjecting qualified handicapped persons to discrimination on the basis of handicap, (ii) that have the purpose or effect of defeating or substantially impairing accomplishment of the objectives of the recipient's program with respect to handicapped persons, or (iii) that perpetuate the discrimination of another recipient if both recipients are subject to common administrative control or are agencies of the same State.

(4) A recipient may not, in determining the site or location of a facility, make selections: (i) That have the effect of excluding handicapped persons from, denying them the benefits of, or otherwise subjecting them to discrimination under any program or activity that receives or benefits from Federal financial assistance or (ii) that have the purpose or effect of defeating or substantially impairing the accomplishment of the objectives of the program or activity with respect to handicapped persons.

(c) The exclusion of nonhandicapped persons from the benefits of a program limited by Federal statute or Executive Order to handicapped persons or the exclusion of a specific class of handicapped persons from a program limited by Federal statute or Executive order to a different class of handicapped persons is not prohibited by this subpart.

(d) Recipients shall administer programs and activities in the most integrated setting appropriate to the needs of qualified handicapped persons.

(e) Recipients shall take appropriate steps to ensure that communications with their applicants, employees, and beneficiaries are available to persons with impaired vision and hearing.

§ 4.122 General prohibitions against employment discrimination.

(a) No qualified handicapped person shall, on the basis of handicap, be subjected to discrimination in employment under any program or activity that receives or benefits from Federal financial assistance.

(b) A recipient shall make all decisions concerning employment under any program or activity to which this subpart applies in a manner which ensures that discrimination on the basis of handicap does not occur and may not limit, segregate, or classify applicants or employees in any way that adversely affects their opportunities or status because of handicap.

(c) The prohibition against discrimination in employment applies to the following activities:

(1) Recruitment, advertising, and the processing of applications for employment;

(2) Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff, and rehiring;

(3) Rates of pay or any other form of compensation and changes in compensation;

(4) Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;

(5) Leaves of absence, sick leave, or any other leave;

(6) Fringe benefits available by virtue of employment, whether or not administered by the recipient;

(7) Selection and financial support for training, including apprenticeship, professional meetings, conferences, and other related activities and selection for leaves of absence to pursue training;

(8) Employer sponsored activities, including social or recreational programs; and

(9) Any other term, condition, or privilege of employment.

(d) A recipient may not participate in a contractual or other relationship that has the effect of subjecting qualified handicapped applicants or employees to discrimination prohibited by this subpart. The relationships referred to in this paragraph include relationships with employment and referral agencies, with labor unions, with organizations providing or administering fringe benefits to employees of the recipient, and with organizations providing training and apprenticeship programs.

§ 4.123 Reasonable accommodation.

(a) A recipient shall make reasonable accommodation to the known physical or mental limitations of an otherwise qualified handicapped applicant or employee unless the recipient can demonstrate that the accommodation would impose an undue hardship on the operation of its program.

(b) Reasonable accommodation may include: (1) Making facilities used by employees readily accessible to and usable by handicapped persons, and (2) job restructuring, part-time or modified work schedules, acquisition or modification of equipment or devices, the provision of readers or interpreters, and other similar actions. This list is neither all-inclusive nor meant to suggest that an employer must follow all the actions listed.

(c) In determining pursuant to paragraph (a) of this section whether an accommodation would impose an undue hardship on the operation of a recipient's program, factors to be considered include:

(1) The overall size of the recipient's program with respect to number of employees, number and type of facilities, and size of budget;

(2) The type of the recipient's operations, including the composition and structure of the recipient's workforce; and

(3) The nature and cost of the accommodation needed.

(d) A recipient may not deny any employment opportunity to a qualified handicapped employee or applicant if the basis for denial is the need to make reasonable accommodation to the physical or mental limitations of the employee or applicant.

§ 4.124 Employment criteria.

(a) A recipient may not make use of any employment test or other selection criterion that screens out or tends to screen out handicapped persons or any class of handicapped persons unless:

(1) The test score or other selection criterion as used by the recipient is shown to be job-related for the position in question, and

(2) Alternative job-related tests or criteria that do not screen out or tend to screen out as many handicapped persons are not available.

(b) A recipient shall select and administer tests concerning employment so as best to ensure that, when administered to an applicant or employee who has a handicap that impairs sensory, manual, or speaking skills, the test results accurately reflect the applicant's or employee's job skills, aptitude, or whatever other factor the test purports to measure, rather than reflecting the applicant's or employee's impaired sensory, manual, or speaking skills (except where those skills are the factors that the test purports to measure).

§ 4.125 Preemployment inquiries.

(a) Except as provided in paragraphs (b) and (c) of this section, a recipient may not conduct a preemployment medical examination or may not make preemployment inquiry of an applicant as to whether the applicant is a handicapped person or as to the nature of severity of a handicap. A recipient may, however, make preemployment inquiry into an applicant's ability to perform job-related functions.

(b) When a recipient is taking remedial action to correct the effects of past discrimination, or when a recipient is taking voluntary action to overcome the effects of conditions that resulted in limited participation in its federally assisted program or activity, or when a recipient is taking affirmative action pursuant to section 503 of the Rehabilitation Act of 1973, the recipient may invite applicants for employment to indicate whether and to what extent they are handicapped: *Provided*, That:

(1) The recipient makes clear to the applicant that the information requested is intended for use solely in connection with its remedial action obligations or its voluntary or affirmative action efforts; and

(2) The recipient makes clear to the applicant that the information is being requested on a voluntary basis, that it will be kept confidential as provided in paragraph (d) of this section, that refusal to provide it will not subject the applicant to any adverse treatment, and that it will be used only in accordance with this subpart.

(c) Nothing in this section shall prohibit a recipient from conditioning an offer of employment on the results of a medical examination conducted prior to the employee's entrance on duty: *Provided*, That:

(1) All entering employees are subjected to such an examination regardless of handicap, and

(2) The results of such an examination are used only in accordance with the requirements of this subpart.

(d) Information obtained in accordance with this section as to the medical condition or history of the applicant must be collected on separate forms. The recipient shall retain each form as a record for three years from the date the applicant's employment ends, or, if not hired, from the date of application. Each form must be accorded confidentiality as a medical record, except that:

(1) Supervisors and managers may be informed regarding restrictions on the work or duties that may be assigned to handicapped persons and regarding necessary accommodations;

(2) First aid and safety personnel may be informed, where appropriate, if the condition associated with the handicap might require emergency treatment; and

(3) Government officials investigating compliance with the Rehabilitation Act of 1973 shall be provided relevant information upon request.

[45 FR 14535, Mar. 6, 1980, as amended at 53 FR 19244, May 27, 1988]

§ 4.126 General requirement concerning program accessibility.

No qualified handicapped person shall, because a recipient's facilities are inaccessible to or unusable by handicapped persons, be denied the benefits of, be excluded from participation in, or otherwise be subjected to discrimination under any program or activity that receives or benefits from Federal financial assistance.

§ 4.127 Existing facilities.

(a) *Program accessibility.* A recipient shall operate each program or activity so that the program or activity, when viewed in its entirety, is readily accessible to and usable by handicapped persons. This paragraph does not necessarily require a recipient to make each of its existing facilities or every part of an existing facility accessible to and usable by handicapped persons.

(b) *Methods.* A recipient may comply with the requirements of paragraph (a) of this section through such means as redesign of equipment, reassignment of classes or other services to accessible buildings, assignment of aids to beneficiaries, home visits, delivery of health, welfare or other social services at alternate accessible sites, alteration of existing facilities and construction of new facilities in conformance with the requirements of § 4.128 or any other methods that result in making its program or activity accessible to and usable by handicapped persons. A recipient is not required to make structural changes in existing facilities where other methods are effective in achieving compliance with paragraph (a) of this section. In choosing among available methods for meeting the requirement of paragraph (a) of this section, a recipient shall give priority to those methods that offer programs and activities to handicapped persons in the most integrated setting appropriate.

(c) *Time period.* A recipient shall comply with the requirement of paragraph (a) of this section within 60 days of the effective date of this subpart except that where structural changes in facilities are necessary, the changes are to be made within three years of the effective date of this subpart, but in any event, as expeditiously as possible.

(d) *Transition plan.* In the event that structural changes to facilities are necessary to meet the requirement of paragraph (a) of this section, a recipient shall develop a transition plan setting forth the steps necessary to complete the changes. The plan is to be developed with the assistance of interested persons, including handicapped persons, or organizations representing handicapped persons, and the plan is to meet with the approval of the NRC. The recipient shall retain a copy of the transition plan as a record until any structural change to a facility is complete. A copy of the transition plan is to be made available for public inspection. At a minimum, the plan is to:

(1) Identify physical obstacles in the recipient's facilities that limit the accessibility and usability of its program or activity to handicapped persons;

(2) Describe in detail the methods that will be used to make the facilities accessible to and usable by handicapped persons;

(3) Specify the schedule for taking the steps necessary to achieve full program accessibility and, if the time period or the transition plan is longer than 1 year, identify steps that will be taken during each year of the transition period; and

(4) Indicate the person responsible for implementation of the plan.

(e) *Notice.* The recipient shall adopt and implement procedures to ensure that interested persons, including persons with impaired vision or hearing, can obtain information concerning the existence and location of services, activities, and facilities that are accessible to, and usable by, handicapped persons.

[45 FR 14535, Mar. 6, 1980, as amended at 53 FR 19244, May 27, 1988]

§ 4.128 New construction.

(a) ***Design, construction, and alteration.*** New facilities shall be designed and constructed to be readily accessible to and usable by handicapped persons. Alterations to existing facilities shall, to the maximum extent feasible, be designed and constructed to be readily accessible to and usable by handicapped persons.

(b) ***Conformance with Uniform Federal Accessibility Standards.*** (1) Effective as of January 18, 1991, design, construction, or alteration of buildings in conformance with sections 3-8 of the Uniform Federal Accessibility Standards (USAF) (appendix A to 41 CFR subpart 101-19.6) shall be deemed to comply with the requirements of this section with respect to those buildings. Departures from particular technical and scoping requirements of UFAS by the use of other methods are permitted where substantially equivalent or greater access to and usability of the building is provided.

(2) For purposes of this section, section 4.1.6(1)(g) of UFAS shall be interpreted to exempt from the requirements of UFAS only mechanical rooms and other spaces that, because of their intended use, will not require accessibility to the public or beneficiaries or result in the employment or residence therein of persons with physical handicaps.

(3) This section does not require recipients to make building alterations that have little likelihood of being accomplished without removing or altering a load-bearing structural member.

[55 FR 52138, 52139, Dec. 19, 1990]

EFFECTIVE DATE NOTE: At 55 FR 52138, 52139, Dec. 19, 1990, § 4.128 was amended by adding the heading *Design, construction, and alteration* to the beginning of paragraph (a) and by revising paragraph (b), effective January 18, 1991. For the convenience of the user, the superseded text is set forth as follows.

§ 4.128 New construction.

* * * * *

(b) Design, construction, or alteration of facilities in conformance with the "American National Standard Specifications for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped," published by the American National Standards Institute, Inc. (ANSI A117.1-1961(R1971)), which is incorporated by reference in this subpart, shall constitute compliance with paragraph (a) of this section. Departures from particular requirements of those standards by the use of other methods shall be permitted when it is clearly evident that equivalent access to and use of the facility or part of the facility is thereby provided.

ENFORCEMENT

§ 4.231 Responsibility of applicants and recipients.

(a) *Assurances.* An applicant for Federal financial assistance for a program or activity to which this subpart applies shall submit an assurance, on a form specified by the responsible NRC official, that the program will be operated in compliance with the subpart. An applicant may incorporate these assurances by reference in subsequent applications to the NRC.

(b) *Duration of obligation.* The assurance will obligate the recipient for the period during which Federal financial assistance is extended.

(c) *Remedial action.* (1) If the responsible NRC official finds that a recipient has discriminated against persons on the basis of handicap in violation of section 504 or this subpart, the recipient shall take such remedial action as the responsible NRC official deems necessary to overcome the effect of the discrimination.

(2) Where a recipient is found to have discriminated against persons on the basis of handicap in violation of section 504 or this subpart and where another recipient exercises control over the recipient that has discriminated, the responsible NRC official, where appropriate, may require either or both recipients to take remedial action.

(3) The responsible NRC official may, where necessary to overcome the effects of discrimination in violation of section 504 or this subpart, require a recipient to take remedial action: (i) With respect to handicapped persons who are no longer participants in the recipient's program but who were participants in the program when such discrimination occurred or (ii) with respect to handicapped persons who would have been participants in the program had the discrimination not occurred.

(d) *Voluntary action.* A recipient may take steps, in addition to any action that is required by this subpart, to overcome the effects of conditions that resulted in limited participation in the recipient's program or activity by qualified handicapped persons.

(e) *Self-evaluation.* (1) A recipient shall as soon as practicable:

(i) Evaluate, with the assistance of interested persons, including handicapped persons or organizations representing handicapped persons, its current policies and practices and the effects thereof that do not or may not meet the requirements of this subpart;

(ii) Modify, after consultation with interested persons, including handicapped persons or organizations representing handicapped persons, any policies and practices that do not meet the requirements of this subpart; and

(iii) Take, after consultation with interested persons, including handicapped persons or organizations representing handicapped persons, appropriate remedial steps to eliminate the effects of any discrimination that resulted from adherence to those policies and practices.

(2) A recipient shall, for at least three years following completion of the evaluation required under paragraph (e)(1) of this section, maintain on file, make available for public inspection, and provide to the responsible NRC official upon request: (i) A list of the interested persons consulted, (ii) a description of areas examined and any problems identified, and (iii) a description of any modifications made and of any remedial steps taken.

(f) Designation of responsible employee. A recipient shall designate at least one person to coordinate its efforts to comply with this subpart.

§ 4.232 Notice.

(a) A recipient shall take appropriate initial and continuing steps to notify participants, beneficiaries, applicants, and employees, including those with impaired vision or hearing, and unions or professional organizations holding collective bargaining or professional agreements with the recipient that it does not discriminate on the basis of handicap in violation of section 504 and this subpart. The notification shall state, where appropriate, that the recipient does not discriminate in admission or access to, or treatment or employment in, its programs and activities. The notification shall also include an identification of the responsible employee designated pursuant to § 4.231(f). A present recipient shall make the initial notification required by this paragraph within 90 days of the effective date of this subpart. Methods of initial and continuing notification may include the posting of notices, publication in newspapers and magazines, placement of notices in recipients' publications, and distribution of memoranda or other written communications.

(b) If a recipient publishes or uses recruitment materials or publications containing general information that it makes available to participants, beneficiaries, applicants, or employees, it shall include in those materials or publications a statement of the policy described in paragraph (a) of this section. A recipient may meet the requirement of this paragraph either by including appropriate inserts in existing materials and publications or by revising and reprinting the materials and publications.

§ 4.233 Enforcement procedures.

The enforcement and hearing procedures set forth in §§ 4.41 through 4.75 of Subpart A with respect to discrimination based on sex, race, color or national origin shall be used for the enforcement of the regulations in Subpart B with respect to discrimination based on handicap.

Subpart C—Regulations Implementing the Age Discrimination Act of 1975, as Amended

SOURCE: 52 FR 25358, July 7, 1987, unless otherwise noted.

GENERAL

§ 4.301 Purpose and scope.

The purpose of this subpart is to set forth NRC policies and procedures under the Age Discrimination Act of 1975 which prohibits discrimination on the basis of age in programs or activities receiving Federal financial assistance.

§ 4.302 Application of this subpart.

(a) The Age Discrimination Act of 1975 and these regulations apply to any program or activity receiving Federal financial assistance from NRC.

(b) The Age Discrimination Act of 1975 and these regulations do not apply to—

(1) An age distinction contained in that part of a Federal, State, or local statute or ordinance adopted by an elected, general purpose legislative body that—

(i) Provides any benefits or assistance to persons based on age; or

(ii) Establishes criteria for participation in age-related terms; or

(iii) Describes intended beneficiaries or target groups in age-related terms.

(2) Any employment practice of any employer, employment agency, labor organization, or any labor-management joint apprenticeship training program, except for any program or activity receiving Federal financial assistance for public service employment under the Comprehensive Employment and Training Act of 1974 (CETA) (29 U.S.C. 801 et seq.).

§ 4.303 Definitions.

As used in this subpart:

(a) "Act" means the Age Discrimination Act of 1975, as amended, (Title III of Pub. L. 94-135; 89 Stat. 713; 42 U.S.C. 3001 note).

(b) "Action" means any act, activity, policy, rule, standard, or method of administration; or the use of any policy, rule, standard, or method of administration.

(c) "Age" means how old a person is, or the number of elapsed years from the date of a person's birth.

(d) "Age distinction" means any action using age or an age-related term.

(e) "Age-related term" means a word or words which necessarily imply a particular age or range of ages (for example, "children," "adult," "older persons," but not "student").

(f) "Subrecipient" means any of the entities in the definition of "recipient" to which a recipient extends or passes on Federal financial assistance. A subrecipient is generally regarded as a recipient of Federal financial assistance and has all the duties of a recipient in these regulations.

STANDARDS FOR DETERMINING AGE DISCRIMINATION

§ 4.311 Rules against age discrimination.

The rules stated in this section are limited by the exceptions contained in §§ 4.313 and 4.314 of this subpart.

(a) *General rule.* No person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under, any program or activity receiving Federal financial assistance.

(b) *Specific rules.* A recipient may not, in any program or activity receiving Federal financial assistance, directly or through contractual, licensing, or other arrangements use age distinctions or take any other actions which have the effect, on the basis of age, of—

(1) Excluding individuals from, denying them the benefits of, or subjecting them to discrimination under, a program or activity receiving Federal financial assistance, or

(2) Denying or limiting individuals in their opportunity to participate in any program or activity receiving Federal financial assistance.

(c) The specific forms of age discrimination listed in paragraph (b) of this section do not necessarily constitute a complete list.

§ 4.312 Definitions of "normal operation" and "statutory objective".

For purposes of §§ 4.313 and 4.314, the terms "normal operation" and "statutory objective" have the following meaning:

(a) "Normal operation" means the operation of a program or activity without significant changes that would impair its ability to meet its objectives.

(b) "Statutory objective" means any purposes of a program or activity expressly stated in any Federal statute State statute, or local statute or ordinance adopted by an elected general purpose legislative body.

§ 4.313 Exceptions to the rules against age discrimination. Normal operation or statutory objective of any program or activity.

A recipient is permitted to take an action, otherwise prohibited by § 4.311, if the action reasonably takes into account age as a factor necessary to the normal operation or the achievement of any statutory objective of a program of activity. An action reasonably takes into account age as a factor necessary to the normal operation or the achievement of any statutory objective of a program or activity, if—

(a) Age is used as a measure or approximation of one or more other characteristics; and

(b) The other characteristic(s) must be measured or approximated in order for the normal operation of the program or activity to continue, or to achieve any statutory objective of the program or activity; and

(c) The other characteristic(s) can be reasonably measured or approximated by the use of age; and

(d) The other characteristic(s) are impractical to measure directly on an individual basis.

§ 4.314 Exceptions to the rule against age discrimination. Reasonable factors other than age.

A recipient is permitted to take an action otherwise prohibited by § 4.311 which is based on a factor other than age, even though that action may have a disproportionate effect on persons of different ages. An action may be based on a factor other than age only if the factor bears a direct and substantial relationship to the normal operation of the program or activity or to the achievement of a statutory objective.

§ 4.315 Burden of proof.

The burden of proving that an age distinction or other action falls within the exceptions outlined in §§ 4.313 and 4.314 is on the recipient of Federal financial assistance.

DUTIES OF NRC RECIPIENTS

§ 4.321 Assurance of compliance.

Each NRC recipient has primary responsibility to ensure that its programs and activities are in compliance with the Act and these regulations. Each recipient will sign an assurance of compliance that its programs and activities will be conducted in compliance with all the requirements imposed by the Act and these regulations. A recipient also has responsibility to maintain records, provide information, and to afford access to its records to NRC, to the extent required to determine whether it is in compliance with the Act and these regulations.

§ 4.322 Written notice, technical assistance, and educational materials.

(a) NRC will provide written notice to each recipient of its obligations under the Act and these regulations, including its obligation under paragraph (b) of this section.

(b) Where a recipient makes available Federal financial assistance from NRC to a subrecipient, the recipient shall provide the subrecipient written notice of the subrecipient's obligations under the Act and these regulations.

(c) NRC will provide technical assistance, where necessary, to recipients to aid them in complying with the Act and these regulations.

(d) NRC will make available educational materials which set forth the rights and obligations of recipients and beneficiaries under the Act and these regulations.

§ 4.324 Information requirements.

Each recipient shall:

(a) Make available upon request to NRC information necessary to determine whether the recipient is complying with the Act and these regulations.

(b) Permit reasonable access by NRC to the recipient's books, records, accounts, facilities, and other sources of information to the extent necessary to determine whether the recipient is in compliance with the Act and these regulations.

INVESTIGATION, CONCILIATION, AND ENFORCEMENT PROCEDURES

§ 4.331 Compliance reviews.

(a) NRC may conduct compliance reviews and preaward reviews of recipients or use other similar procedures that will permit it to investigate and correct violations of the Act and these regulations. NRC may conduct these reviews even in absence of a complaint against a recipient. The review may be as comprehensive as necessary to determine whether a violation of these regulations has occurred.

(b) If a compliance review or preaward review indicates a violation of the Act or these regulations, NRC will attempt to achieve voluntary compliance with the Act. If voluntary compliance cannot be achieved, NRC will arrange for enforcement as described in § 4.336.

§ 4.332 Complaints.

(a) Any person, individually or as a member of a class or on behalf of others, may file a complaint with

NRC, alleging discrimination prohibited by the Act or these regulations based on an action occurring on or after July 1, 1979. A complainant shall file a complaint within 180 days from the date the complainant first had knowledge of the alleged act of discrimination. However, for good cause shown, NRC may extend this time limit.

(b) NRC will attempt to facilitate the filing of complaints wherever possible, including taking the following measures:

(1) Accepting a complaint as sufficient for further processing that—

(i) Is made in writing;

(ii) Alleges a violation of the Act;

(iii) Identifies the parties involved and the date the complainant first had knowledge of the alleged violation;

(iv) Describes generally the action or practice complained of; and

(v) Is signed by the complainant.

(2) Freely permitting a complainant to add information to the complaint to meet the requirements of a sufficient complaint.

(3) Notifying the complainant and the recipient of their rights and obligations under the complaint procedure, including the right to have a representative at all stages of the complaint procedures.

(4) Notifying the complainant and the recipient (or their representatives) of their right to contact NRC for information and assistance regarding the complaint resolution process.

(c) Each recipient and complainant shall participate actively in efforts toward speedy resolution of the complaint.

(d) NRC will return to the complainant any complaint outside the jurisdiction of these regulations, and will state the reason(s) why it is outside the jurisdiction of these regulations.

§ 4.333 Mediation.

(a) Referral of complaints for mediation. NRC will refer to a mediation agency designated by the Secretary of the Department of Health and Human Services all complaints that—

(1) Fall within the jurisdiction of the Act and these regulations; and

(2) Contain all information necessary for further processing.

(b) Both the complainant and the recipient shall participate in the mediation process to the extent necessary to reach an agreement or make an informed judgment that an agreement is not possible. There must be at least one meeting with the mediator before NRC will accept a judgment that an agreement is not possible. However, the recipient and the complainant need not meet with the mediator at the same time.

(c) If the complainant and the recipient reach an agreement, the mediator shall prepare a written statement of the agreement and have the complainant and recipient sign it. The mediator shall send a copy of the agreement to NRC. NRC will take no further action on the complaint unless the complainant or recipient fails to comply with the agreement.

(d) The mediator shall protect the confidentiality of all information obtained in the course of the mediation process. No mediator shall testify in any adjudicative proceeding, produce any document, or otherwise disclose any information obtained in the course of the mediation process without prior approval of the head of the agency appointing the mediator.

(e) NRC will use the mediation process for a maximum of 60 days after receiving a complaint. Mediation ends if—

(1) From the time NRC receives the complaint 60 days elapse; or

(2) Prior to the end of that 60-day period, the mediator determines an agreement is reached; or

(3) Prior to the end of that 60-day period, the mediator determines that an agreement cannot be reached.

(f) The mediator shall return unresolved complaints to NRC.

§ 4.334 Investigation.

(a) *Informal investigation.* (1) NRC will investigate complaints that are unresolved after mediation or are reopened because of a violation of a mediation agreement.

(2) As part of the initial investigation, NRC will use informal fact-finding methods, including joint or separate discussions with the complaint and recipient to establish the facts

and, if possible, settle the complaint on terms that are mutually agreeable to the parties. NRC may seek the assistance of any involved State program agency.

(3) NRC will put any agreement in writing and have it signed by the parties and an authorized official at NRC.

(4) The settlement shall not affect the operation of any other enforcement effort of NRC, including compliance reviews and investigation of other complaints which may involve the recipient.

(5) Settlement of a complaint under this section will not constitute a finding of discrimination by the NRC against a recipient or an admission of discrimination by the recipient.

(b) *Formal investigation.* If NRC cannot resolve the complaint through informal investigation, it will begin to develop formal findings through further investigation of the complaint. If the investigation indicates a violation of these regulations, NRC will attempt to obtain voluntary compliance. If NRC cannot obtain voluntary compliance, it will begin enforcement as described in § 4.336.

§ 4.335 Prohibition against intimidation or retaliation.

A recipient may not engage in acts of intimidation or retaliation against any person who—

(a) Attempts to assert a right protected by the Act or these regulations; or

(b) Cooperates in any mediation, investigation, hearing, or other part of NRC's investigation, conciliation, and enforcement process.

§ 4.336 Compliance procedure.

(a) NRC may enforce the Act and these regulations through—

(1) Termination of a recipient's Federal financial assistance from NRC under the program or activity involved where the recipient has violated the Act or these regulations. The determination of the recipient's violation may be made only after a recipient has had an opportunity for a hearing on the record before an administrative law judge. Therefore, cases that are settled in mediation, or prior to a hearing, will not involve termination of a recipient's Federal fiancial assistance from NRC.

(2) Any other means authorized by law including but not limited to—

(i) Referral to the Department of Justice for proceedings to enforce any rights of the United States or obligations of the recipients created by the Act or these regulations.

(ii) Use of any requirement of or referral to any Federal, State, or local government agency that will have the effect of correcting a violation of the Act or these regulations.

(b) NRC will limit any termination under § 4.336(a)(1) to the particular recipient and particular program or activity NRC finds in violation of Act or these regulations. NRC will not base any part of a termination on a finding with respect to any program or activity of the recipient that does not receive Federal financial assistance from NRC.

(c) NRC will take no action under paragraph (a) until—

(1) The Commission, or designee, has advised the recipient of its failure to comply with the Act or these regulations and has determined that voluntary compliance cannot be obtained.

(2) 30 days have elapsed after the Commission, or designee, has sent a written report of the circumstances and grounds of the action to the committees of the Congress having legislative jurisdiction over the Federal program or activity involved. A report will be filed whenever any action is taken under paragraph (a) of this section.

(d) NRC also may defer granting new Federal financial assistance to a recipient when termination proceedings under § 4.336(a)(1) are initiated.

(1) New Federal financial assistance includes all assistance for which NRC requires an application or approval, including renewal or continuation of existing activities or authorization of new activities, during the deferral period. New Federal financial assistance does not include increases in funding as a result of change computation of formula awards or assistance approved prior to the beginning of termination proceedings under § 4.336(a)(1).

(2) NRC will not begin a deferral until the recipient has received a

notice of an opportunity for a hearing under § 4.336(a)(1). NRC will not continue a deferral for more than 60 days unless a hearing has begun within that time or the time for beginning the hearings has been extended by mutual consent of the recipient and NRC. NRC will not continue a deferral for more than 30 days after the close of the hearing, unless the hearing results in a finding against the recipient.

§ 4.337 Hearings, decisions, post-termination proceedings.

Certain NRC procedural provisions applicable to Title VI of the Civil Rights Act of 1964 apply to NRC enforcement of these regulations. They are §§ 4.61 through 4.64 and §§ 4.71 through 4.75.

§ 4.338 Remedial and affirmative action by recipients.

(a) Where NRC finds a recipient has discriminated on the basis of age, the recipient shall take any remedial action that NRC may require to overcome the effects of the discrimination. If another recipient exercises control over the recipient that has discriminated, NRC may require both recipients to take remedial action.

(b) Even in the absence of a finding of discrimination, a recipient may take affirmative action to overcome the effects of conditions that resulted in limited participation in the recipient's program or activity on the basis of age.

(c) If a recipient, operating a program that serves the elderly or children in addition to persons of other ages, provides special benefits to the elderly or to children, the provision of those benefits shall be presumed to be voluntary affirmative action provided that is does not have the effect of excluding otherwise eligible persons from participation in the program.

§ 4.339 Alternate funds disbursal procedure.

(a) When NRC withholds funds from a recipient under these regulations, the Commission, or designee, may disburse the withheld funds directly to an alternate recipient, any public or nonprofit private organization or agency, or State or political subdivision of the State.

(b) Any alternative recipient will be required to demonstrate—

(1) The ability to comply with these regulations; and

(2) The ability to achieve the goals of the Federal statute authorizing the program or activity.

§ 4.340 Exhaustion of administrative remedies.

(a) A complainant may file a civil action following the exhaustion of administrative remedies under the Act. Administrative remedies are exhausted if—

(1) 180 days have elapsed since the complainant filed the complaint and NRC has made no finding with regard to the complaint; or

(2) NRC issues any finding in favor of the recipient.

(b) If NRC fails to make a finding within 180 days or issues a finding in favor of the recipient, NRC will—

(1) Promptly advise the complainant; and

(2) Advise the complainant of his or her right to bring a civil action under section 305(e) of the Act of injunctive relief that will effect the purposes of the Act; and

(3) Inform the complainant that—

(i) The complainant may bring a civil action only in a United States District Court for the district in which the recipient is found or transacts business;

(ii) A complainant prevailing in a civil action has the right to be awarded the costs of the action, including reasonable attorney's fees, but that the complainant must demand these costs in the complaint;

(iii) That before commencing the action, the complainant shall give 30 days notice by registered mail to the Commission, the Secretary of the Department of Health and Human Services, the Attorney General of the United States, and the recipient;

(iv) The notice must state the relief requested, the court in which the complainant is bringing the action, and whether or not attorney's fees are demanded in the event the complainant prevails; and

(v) The complainant may not bring an action if the same alleged violation of the Act by the same recipient is the subject of pending action in any court of the United States.

§ 4.341 Reports.

The NRC shall submit to the Secretary of Health and Human Services, not later than December 31 of each year, a report which—

(a) Describes in detail the steps taken during the preceding fiscal year to carry out the Act; and

(b) Contains data on the frequency, type, and resolution of complaints and on any compliance reviews, sufficient to permit analysis of the agency's progress in reducing age discrimination in programs receiving Federal financial assistance from NRC; and

(c) Contains data directly relevant to the extent of any pattern or practice of age discrimination which NRC has identified in any programs receiving Federal financial assistance from NRC and to progress toward eliminating it; and

(d) Contains evaluative or interpretative information which NRC determines is useful in analyzing agency progress in reducing age discrimination in programs receiving Federal financial assistance from NRC; and

(e) Contains whatever other data the Secretary of HHS may require.

Subpart D—[Reserved]

Subpart E—Enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities Conducted by the U.S. Nuclear Regulatory Commission

SOURCE: 51 FR 22888, 22896, June 23, 1986, unless otherwise noted.

§ 4.501 Purpose.

This part effectuates section 119 of the Rehabilitation, Comprehensive Services, and Developmental Disabilities Amendments of 1978, which amended section 504 of the Rehabilitation Act of 1973 to prohibit discrimination on the basis of handicap in programs or activities conducted by Executive agencies or the United States Postal Service.

§ 4.502 Application.

This part applies to all programs or activities conducted by the agency.

§ 4.503 Definitions.

For purposes of this part, the term—

"Assistant Attorney General" means the Assistant Attorney General, Civil Rights Division, United States Department of Justice.

"Auxiliary aids" means services or devices that enable persons with impaired sensory, manual, or speaking skills to have an equal opportunity to participate in, and enjoy the benefits of, programs or activities conducted by the agency. For example, auxiliary aids useful for persons with impaired vision include readers, brailled materials, audio recordings, telecommunications devices and other similar services and devices. Auxiliary aids useful for persons with impaired hearing include telephone handset amplifiers, telephones compatible with hearing aids, telecommunication devices for deaf persons (TDD's), interpreters, notetakers, written materials, and other similar services and devices.

"Complete complaint" means a written statement that contains the complainant's name and address and describes the agency's alleged discriminatory action in sufficient detail to inform the agency of the nature and date of the alleged violation of section 504. It shall be signed by the complainant or by someone authorized to do so on his or her behalf. Complaints filed on behalf of classes or third parties shall describe or identify (by name, if possible) the alleged victims of discrimination.

"Facility" means all or any portion of buildings, structures, equipment, roads, walks, parking lots, rolling stock or other conveyances, or other real or personal property.

"Handicapped person" means any person who has a physical or mental impairment that substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having such an impairment.

As used in this definition, the phrase:

(1) "Physical or mental impairment" includes—

(i) Any physiological disorder or condition, cosmetic disfigurement, or anatomical loss affecting one or more of the following body systems: Neurological; musculoskeletal; special sense organs; respiratory, including speech organs; cardiovascular; reproductive; digestive; genitourinary; hemic and lymphatic; skin; and endocrine; or

(ii) Any mental or psychological disorder, such as mental retardation, organic brain syndrome, emotional or mental illness, and specific learning disabilities. The term "physical or mental impairment" includes, but is not limited to, such diseases and conditions as orthopedic, visual, speech, and hearing impairments, cerebral palsy, epilepsy, muscular dystrophy, multiple sclerosis, cancer, heart disease, diabetes, mental retardation, emotional illness, and drug addiction and alocoholism.

(2) "Major life activities" includes functions such as caring for one's self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working.

(3) "Has a record of such an impairment" means has a history of, or has been misclassified as having, a mental or physical impairment that substantially limits one or more major life activities.

(4) "Is regarded as having an impairment" means—

(i) Has a physical or mental impairment that does not substantially limit major life activities but is treated by the agency as constituting such a limitation;

(ii) Has a physical or mental impairment that substantially limits major life activities only as a result of the attitudes of others toward such impairment; or

(iii) Has none of the impairments defined in paragraph (1) of this definition but is treated by the agency as having such an impairment.

"Historic preservation programs" means programs conducted by the agency that have preservation of historic properties as a primary purpose.

"Historic properties" means those properties that are listed or eligible for listing in the National Register of Historic Places or properties designated as historic under a statute of the appropriate State or local government body.

"Qualified handicapped person" means—

(1) With respect to preschool, elementary, or secondary education services provided by the agency, a handicapped person who is a member of a class of persons otherwise entitled by statute, regulation, or agency policy to receive education services from the agency.

(2) With respect to any other agency program or activity under which a person is required to perform services or to achieve a level of accomplishment, a handicapped person who meets the essential eligibility requirements and who can acheive the purpose of the program or activity without modifications in the program or activity that the agency can demonstrate would result in a fundamental alteration in its nature;

(3) With respect to any other program or activity, a handicapped person who meets the essential eligibility requirements for participation in, or receipt of benefits from, that program or activity; and

(4) "Qualified handicapped person" is defined for purposes of employment in 29 CFR 1613.702(f), which is made applicable to this part by § 4.540.

"Section 504" means section 504 of the Rehabilitation Act of 1973 (Pub. L. 93-112, 87 Stat. 394 (29 U.S.C. 794)), as amended by the Rehabilitation Act Amendments of 1974 (Pub. L. 93-516, 88 Stat. 1617), and the Rehabilitation, Comprehensive Services, and Developmental Disabilities Amendments of 1978 (Pub. L. 95-602, 92 Stat. 2955). As used in this part, section 504 applies only to programs or activities conducted by Executive agencies and not to federally assisted programs.

"Substantial impairment" means a significant loss of the integrity of finished materials, design quality, or special character resulting from a permanent alteration.

§§ 4.504—4.509 [Reserved]

§ 4.510 Self-evaluation.

(a) The agency shall, by August 24, 1987, evaluate its current policies and practices, and the effects thereof, that do not or may not meet the requirements of this part, and, to the extent modification of any such policies and practices is required, the agency shall proceed to make the necessary modifications.

(b) The agency shall provide an opportunity to interested persons, including handicapped persons or organizations representing handicapped persons, to participate in the self-evaluation process by submitting comments (both oral and written).

(c) The agency shall, until three years following the completion of the self-evaluation, maintain on file and make available for public inspection:

(1) A description of areas examined and any problems identified, and

(2) A description of any modifications made.

§ 4.511 Notice.

The agency shall make available to employees, applicants, participants, beneficiaries, and other interested persons such information regarding the provisions of this part and its applicability to the programs or activities conducted by the agency, and make such information available to them in such manner as the head of the agency finds necessary to apprise such persons of the protections against discrimination assured them by section 504 and this regulation.

§§ 4.512—4.529 [Reserved]

§ 4.530 General prohibitions against discrimination.

(a) No qualified handicapped person shall, on the basis of handicap, be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity conducted by the agency.

(b)(1) The agency, in providing any aid, benefit, or service, may not, directly or through contractual, licensing, or other arrangements, on the basis of handicap—

(i) Deny a qualified handicapped person the opportunity to participate in or benefit from the aid, benefit, or service;

(ii) Afford a qualified handicapped person an opportunity to participate in or benefit from the aid, benefit, or service that is not equal to that afforded others;

(iii) Provide a qualified handicapped person with an aid, benefit, or service that is not as effective in affording equal opportunity to obtain the same result, to gain the same benefit, or to reach the same level of achievement as that provided to others;

(iv) Provide different or separate aid, benefits, or services to handicapped persons or to any class of handicapped persons than is provided to others unless such action is necessary to provide qualified handicapped persons with aid, benefits, or services that are as effective as those provided to others;

(v) Deny a qualified handicapped person the opportunity to participate as a member of planning or advisory boards; or

(vi) Otherwise limit a qualified handicapped person in the enjoyment of any right, privilege, advantage, or opportunity enjoyed by others receiving the aid, benefit, or service.

(2) The agency may not deny a qualified handicapped person the opportunity to participate in programs or activities that are not separate or different, despite the existence of permissibly separate or different programs or activities.

(3) The agency may not, directly or through contractual or other arrangements, utilize criteria or methods of administration the purpose or effect of which would—

(i) Subject qualified handicapped persons to discrimination on the basis of handicap; or

(ii) Defeat or substantially impair accomplishment of the objectives of a program or activity with respect to handicapped persons.

(4) The agency may not, in determining the site or location of a facility, make selections the purpose or effect of which would—

(i) Exclude handicapped persons from, deny them the benefits of, or otherwise subject them to discrimination under any program or activity conducted by the agency; or

(ii) Defeat or substantially impair the accomplishment of the objectives of a program or activity with respect to handicapped persons.

(5) The agency, in the selection of procurement contractors, may not use criteria that subject qualified handicapped persons to discrimination on the basis of handicap.

(6) The agency may not administer a licensing or certification program in a manner that subjects qualified handicapped persons to discrimination on the basis of handicap, nor may the agency establish requirements for the programs or activities of licensees or certified entities that subject qualified handicapped persons to discrimination on the basis of handicap. However, the programs or activities of entities that are licensed or certified by the agency are not, themselves, covered by this part.

(c) The exclusion of nonhandicapped persons from the benefits of a program limited by Federal statute or Executive order to handicapped persons or the exclusion of a specific class of handicapped persons from a program limited by Federal statute or Executive order to a different class of handicapped persons is not prohibited by this part.

(d) The agency shall administer programs and activities in the most integrated setting appropriate to the needs of qualified handicapped persons.

§§ 4.531—4.539 [Reserved]

§ 4.540 Employment.

No qualified handicapped person shall, on the basis of handicap, be subjected to discrimination in employment under any program or activity conducted by the agency. The definitions, requirements, and procedures of section 501 of the Rehabilitation Act of 1973 (29 U.S.C. 791), as established by the Equal Employment Opportunity Commission in 29 CFR Part 1613, shall apply to employment in federally conducted programs or activities.

§§ 4.541—4.548 [Reserved]

§ 4.549 Program accessibility: Discrimination prohibited.

Except as otherwise provided in § 4.550, no qualified handicapped person shall, because the agency's facilities are inaccessible to or unusable by handicapped persons, be denied the benefits of, be excluded from participation in, or otherwise be subjected to discrimination under any program or activity conducted by the agency.

§ 4.550 Program accessibility: Existing facilities.

(a) *General.* The agency shall operate each program or activity so that the program or activity, when viewed in its entirety, is readily accessible to and usable by handicapped persons. This paragraph does not—

(1) Necessarily require the agency to make each of its existing facilities accessible to and usable by handicapped persons;

(2) In the case of historic preservation programs, require the agency to take any action that would result in a substantial impairment of significant historic features of an historic property; or

(3) Require the agency to take any action that it can demonstrate would result in a fundamental alteration in the nature of a program or activity or in undue financial and administrative burdens. In those circumstances where agency personnel believe that the proposed action would fundamentally alter the program or activity or would result in undue financial and administrative burdens, the agency has the burden of proving that compliance with § 4.550(a) would result in such alteration or burdens. The decision that compliance would result in such alteration or burdens must be made by the agency head or his or her designee after considering all agency resources available for use in the funding and operation of the conducted program or activity, and must be accompanied by a written statement of the reasons for reaching that conclusion. If an action would result in such an alteration or such burdens, the agency shall take any other action that would not result

in such an alteration or such burdens but would nevertheless ensure that handicapped persons receive the benefits and services of the program or activity.

(b) *Methods*—(1) *General.* The agency may comply with the requirements of this section through such means as redesign of equipment, reassignment of services to accessible buildings, assignment of aides to beneficiaries, home visits, delivery of services at alternate accessible sites, alteration of existing facilities and construction of new facilities, use of accessible rolling stock, or any other methods that result in making its programs or activities readily accessible to and usable by handicapped persons. The agency is not required to make structural changes in existing facilities where other methods are effective in achieving compliance with this section. The agency, in making alterations to existing buildings, shall meet accessibility requirements to the extent compelled by the Architectural Barriers Act of 1968, as amended (42 U.S.C. 4151-4157), and any regulations implementing it. In choosing among available methods for meeting the requirements of this section, the agency shall give priority to those methods that offer programs and activities to qualified handicapped persons in the most integrated setting appropriate.

(2) *Historic preservation programs.* In meeting the requirements of § 4.550(a) in historic preservation programs, the agency shall give priority to methods that provide physical access to handicapped persons. In cases where a physical alteration to an historic property is not required because of § 4.550(a)(2) or (a)(3), alternative methods of achieving program accessibility include—

(i) Using audio-visual materials and devices to depict those portions of an historic property that cannot otherwise be made accessible;

(ii) Assigning persons to guide handicapped persons into or through portions of historic properties that cannot otherwise be made accessible; or

(iii) Adopting other innovative methods.

(c) *Time period for compliance.* The agency shall comply with the obligations established under this section by October 21, 1986, except that where structural changes in facilities are undertaken, such changes shall be made by August 22, 1989, but in any event as expeditiously as possible.

(d) *Transition plan.* In the event that structural changes to facilities will be undertaken to achieve program accessibility, the agency shall develop, by February 23, 1987 a transition plan setting forth the steps necessary to complete such changes. The agency shall provide an opportunity to interested persons, including handicapped persons or organizations representing handicapped persons, to participate in the development of the transition plan by submitting comments (both oral and written). A copy of the transition plan shall be made available for public inspection. The plan shall, at a minimum—

(1) Identify physical obstacles in the agency's facilities that limit the accessibility of its programs or activities to handicapped persons;

(2) Describe in detail the methods that will be used to make the facilities accessible;

(3) Specify the schedule for taking the steps necessary to achieve compliance with this section and, if the time period of the transition plan is longer than one year, identify steps that will be taken during each year of the transition period; and

(4) Indicate the official responsible for implementation of the plan.

§ 4.551 Program accessibility: New construction and alterations.

Each building or part of a building that is constructed or altered by, on behalf of, or for the use of the agency shall be designed, constructed, or altered so as to be readily accessible to and usable by handicapped persons. The definitions, requirements, and standards of the Architectural Barriers Act (42 U.S.C. 4151-4157), as established in 41 CFR 101-19.600 to 101-19.607, apply to buildings covered by this section.

§§ 4.552—4.559 [Reserved]

§ 4.560 Communications.

(a) The agency shall take appropriate steps to ensure effective communication with applicants, participants, personnel of other Federal entities, and members of the public.

(1) The agency shall furnish appropriate auxiliary aids where necessary to afford a handicapped person an equal opportunity to participate in, and enjoy the benefits of, a program or activity conducted by the agency.

(i) In determining what type of auxiliary aid is necessary, the agency shall give primary consideration to the requests of the handicapped person.

(ii) The agency need not provide individually prescribed devices, readers for personal use or study, or other devices of a personal nature.

(2) Where the agency communicates with applicants and beneficiaries by telephone, telecommunication devices for deaf person (TDD's) or equally effective telecommunication systems shall be used.

(b) The agency shall ensure that interested persons, including persons with impaired vision or hearing, can obtain information as to the existence and location of accessible services, activities, and facilities.

(c) The agency shall provide signage at a primary entrance to each of its inaccessible facilities, directing users to a location at which they can obtain information about accessible facilities. The international symbol for accessibility shall be used at each primary entrance of an accessible facility.

(d) This section does not require the agency to take any action that it can demonstrate would result in a fundamental alteration in the nature of a program or activity or in undue financial and adminstrative burdens. In those circumstances where agency personnel believe that the proposed action would fundamentally alter the program or activity or would result in undue financial and administrative burdens, the agency has the burden of proving that compliance with § 4.560 would result in such alteration or burdens. The decision that compliance would result in such alteration or burdens must be made by the agency head or his or her designee after considering all agency resources available for use in the funding and operation of the conducted program or activity, and must be accompanied by a written statement of the reasons for reaching that conclusion. If an action required to comply with this section would result in such an alteration or such burdens, the agency shall take any other action that would not result in such an alteration or such burdens but would nevertheless ensure that, to the maximum extent possible, handicapped persons receive the benefits and services of the program or activity.

§§ 4.561—4.569 [Reserved]

§ 4.570 Compliance procedures.

(a) Except as provided in paragraph (b) of this section, this section applies to all allegations of discrimination on the basis of handicap in programs or activities conducted by the agency.

(b) The agency shall process complaints alleging violations of section 504 with respect to employment according to the procedures established by the Equal Employment Opportunity Commission in 29 CFR Part 1613 pursuant to section 501 of the Rehabilitation Act of 1973 (29 U.S.C. 791).

(c) The Civil Rights Program Manager, Office of Small and Disadvantaged Business Utilization/Civil Rights, shall be responsible for coordinating implementation of this section. Complaints may be sent to Nuclear Regulatory Commission, Washington, DC 20555.

(d) The agency shall accept and investigate all complete complaints for which it has jurisdiction. All complete complaints must be filed within 180 days of the alleged act of discrimination. The agency may extend this time period for good cause.

(e) If the agency receives a complaint over which it does not have jurisdiction, it shall promptly notify the complainant and shall make reasonable efforts to refer the complaint to the appropriate government entity.

(f) The agency shall notify the Architectural and Transportation Barriers Compliance Board upon receipt of any complaint alleging that a building or facility that is subject to the Architectural Barriers Act of 1968, as amended (42 U.S.C. 4151-4157), or section 502 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 792), is not readily accessible to and usable by handicapped persons.

(g) Within 180 days of the receipt of a complete complaint for which it has jurisdiction, the agency shall notify the complainant of the results of the investigation in a letter containing—

(1) Findings of fact and conclusions of law;

(2) A description of a remedy for each violation found; and

(3) A notice of the right to appeal.

(h) Appeals of the findings of fact and conclusions of law or remedies must be filed by the complainant within 90 days of receipt from the agency of the letter required by § 4.570(g). The agency may extend this time for good cause.

(i) Timely appeals shall be accepted and processed by the head of the agency.

(j) The head of the agency shall notify the complainant of the results of the appeal within 60 days of the receipt of the request. If the head of the agency determines that additional information is needed from the complainant, he or she shall have 60 days from the date of receipt of the additional information to make his or her determination on the appeal.

(k) The time limits cited in paragraphs (g) and (j) of this section may be extended with the permission of the Assistant Attorney General.

(l) The agency may delegate its authority for conducting complaint investigations to other Federal agencies, except that the authority for making the final determination may not be delegated to another agency.

[51 FR 22888, 22896, June 23, 1986]

§§ 4.571—4.999 [Reserved]

Appendix A—Federal Financial Assistance to Which This Part Applies[1]

(a) *Conferences on regulatory programs.* Agreements for financial assistance to State officials, without full-cost recovery, for visits to NRC facilities and offices or to other locations to confer on regulatory programs and related matters.

(b) *Orientation and instruction.* Agreements for assistance to State and local officials, without full-cost recovery, to receive orientation and on-the-job instruction at NRC facilities and offices.

(c) *Courses in fundamentals of radiation.* Agreements for the conduct of courses for State and local employees, without full-cost recovery, in fundamentals of radiation and radiation protection.

(d) *Participation in meetings and conferences.* Agreements for participation, without full-cost recovery, in meetings, conferences, workshops, and symposia to assist scientific, professional or educational institutions or groups.

(e) *Research Support.* Agreements for the financial support of basic and applied scientific research and for the exchange of scientific information.

[29 FR 19277, Dec. 31, 1964, as amended at 38 FR 17929, July 5, 1973; 40 FR 8778, Mar. 3, 1975; 45 FR 14539, Mar. 6, 1980; 52 FR 25361, July 7, 1987]

PART 7—ADVISORY COMMITTEES

Sec.

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7.6 Amendments to advisory committee charters.
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[1] Categories of assistance may be added to Appendix A from time to time by notice published in the Federal Register. This part shall be deemed to apply to all grants, loans or contracts entered into under any such category of assistance on or after the effective date of the inclusion of the category of assistance in Appendix A.

Sec.
7.9 Public notice of advisory committee establishment, reestablishment, or renewal.
7.10 The NRC Advisory Committee Management Officer.
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7.22 Fiscal and administrative responsibilities.

AUTHORITY: Sec. 161, 68 Stat. 948, as amended (42 U.S.C. 2201); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841); Pub. L. 92-463, 86 Stat. 770 (5 U.S.C. App.).

SOURCE: 54 FR 26948, June 27, 1989, unless otherwise noted

§7.1 Policy.

The regulations in this part define the policies and procedures to be followed by the Nuclear Regulatory Commission in the establishment, utilization, and termination of advisory committees. In general, it is the policy of the Commission that—

(a) Except where there is express legal authority to the contrary, the function of NRC advisory committees shall be advisory only.

(b) Each NRC advisory committee shall function in compliance with the Federal Advisory Commitee Act and this part.

(c) The number of NRC advisory committees shall be kept to the minimum necessary, and the number of members of each NRC advisory committee shall be limited to the fewest necessary to accomplish committee objectives.

(d) An NRC advisory committee shall be established only when establishment of the committee is required by law or when the Commission determines that the committee is essential to the conduct of NRC business. In making such a determination, the Commission shall consider whether committee deliberations will result in a significant contribution to the creation, amendment, or elimination of regulations, guidelines, or rules affecting NRC business; whether the information to be obtained is available through another source within the Federal Government; whether the committee will make recommendations resulting in significant improvements in service or reductions in cost; or whether the committee's recommendations will provide an important additional perspective or viewpoint relating to NRC's mission.

(e) Except where otherwise required by law, an NRC advisory committee shall be terminated whenever the stated objectives of the committee have been accomplished, the subject matter or work of the committee has become obsolete, the committee's main functions have been assumed by another entity within the Federal Government, or the cost of operating the committee has become excessive in relation to the benefits accruing to the Federal Government from its activities.

(f) NRC advisory committees shall be balanced in their membership in terms of the points of view represented and the functions to be performed.

(g) The Congress shall be kept informed of the number, purpose, membership, activities, and cost of NRC advisory committees.

(h) NRC advisory committee meetings shall be open to the public, except where closure is determined to be justified under § 7.15.

§ 7.2 Definitions.

As used in this part:

(a) "Act" means the Federal Advisory Committee Act, as amended, 5 U.S.C. App.

(b) "Administrator" means the Administrator of General Services.

(c)(1) "Advisory committee" means any committee, board, commission, council, conference, panel, task force, or similar group, or any subcommittee or other subgroup thereof, that is established by statute for the purpose of providing advice or recommendations on issues of policy to an official, branch, or agency of the Federal Government, or that is established or utilized by the President or any agency official to obtain advice or recommendations on issues or policies that fall within the scope of his or her responsibilities; except that the term "advisory committee" shall not include the groups listed in paragraph (c)(3) of this section.

(2) For purposes of the definition of "advisory committee" in paragraph (c)(1) of this section, a group shall be considered to be "utilized by the President or any agency official to obtain advice or recommendations on issues or policies that fall within the scope of his or her responsibilities" if (i) the group is composed in whole or in part of other than full-time officers or employees of the Federal Government, (ii) the group has an established existence outside the agency seeking the advice, (iii) the group is a preferred source from which to obtain advice or recommendations on a specific issue or policy within the scope of the President's or agency official's responsibilities, and (iv) such advice or recommendations are obtained in the same manner as advice or recommendations obtained from established advisory committees.

(3) The following advisory meetings or groups are not included in the definition of "advisory committee" in paragraph (c)(1) of this section:

(i) Any group composed wholly of full-time officers or employees of the Federal Government;

(ii) Any group specifically exempted from the Act or these regulations by an Act of Congress;

(iii) Any local civic group whose primary function is that of rendering a public service with respect to a Federal program, or any State or local committee, council, board, commission, or similar group established to advise or make recommendations to any State or local government unit or an official thereof;

(iv) Any group that performs primarily operational functions specifically provided by law, as opposed to advisory functions;

(v) Any meeting initiated by the President or one or more Federal officials for the purpose of obtaining advice or recommendations from one individual;

(vi) Any meeting that is initiated by a Federal official and that is held with more than one individual for the purpose of obtaining the advice of individual attendees and not for the purpose of utilizing the group to obtain consensus advice or recommendations, except where the agency accepts the group's deliberations as a source of consensus advice or recommendations;

(vii) Any meeting initiated by a group with the President or one or more Federal officials for the purpose of expressing the group's view, provided that the President or Federal official does not use the group recurrently as a preferred source of advice or recommendations;

(viii) Any meeting of two or more advisory committee members convened solely to gather information or conduct research for a chartered advisory committee to analyze relevant issues and facts for a chartered advisory committee, or to draft proposed position papers for deliberation by a chartered advisory committee; and

(ix) Any meeting with a group initiated by the President or by one or more Federal officials for the purpose of exchanging facts or information.

(d) "Agency" means an agency of the Government of the United States as defined in 5 U.S.C. 551(1).

(e) "Commission" means the Nuclear Regulatory Commission of five members, or a quorum thereof, sitting as a body, as provided by section 201 of the Energy Reorganization Act of 1974, 42 U.S.C. 5841 (88 Stat. 1242).

(f) "Committee member" means an individual who is appointed to serve on an advisory committee and has the full right and obligation to participate in the activities of the committee, including voting on committee recommendations.

(g) "Designated Federal Official" means a government employee appointed, pursuant to § 7.11(a), to chair or attend each meeting of an NRC advisory committee to which he or she is assigned.

(h) "GSA" means the General Services Administration.

(i) "NRC" means the agency established by title II of the Energy Reorganization Act of 1974, 42 U.S.C. 5801 (88 Stat. 1233), and known as the Nuclear Regulatory Commission.

(j) "NRC Advisory Committee Management Officer" means the individual appointed, pursuant to § 7.10(a), to supervise and control the establishment and management of NRC advisory committees.

(k) "NRC Public Document Room" means the Public Document Room maintained by the NRC at 2120 L Street, NW., Washington, DC.

(l) "Presidential advisory committee" means an advisory committee that advises the President.

(m) "GSA Secretariat" means the Committee Management Secretariat of the General Services Administration, which was established pursuant to the Act.

(n) "Staff member" means any individual who serves in a support capacity to an advisory committee.

§ 7.3 Interpretations.

Except as specifically authorized by the Commission in writing, no interpretation of the meaning of the regulations in this part by an NRC officer or employee, other than a written interpretation by the General Counsel, shall be binding upon the Commission.

§ 7.4 Establishment of advisory committees.

(a) An NRC advisory committee may be established under this part only if its establishment—

(1) Is specifically directed or authorized by statute or by Executive Order of the President; or

(2) Has been determined by the Commission to be in the public interest and essential to the performance of the duties imposed on the Commission by law.

The determination required by paragraph (a)(2) of this section shall be a matter of formal record, and shall include a statement of a clearly defined purpose for the advisory committee.

§ 7.5 Review of establishment of advisory committees by GSA Secretariat; Advisory committee charters.

(a) Whenever the NRC proposes to establish or utilize an advisory committee, a letter requesting review of the proposal and transmitting a proposed charter for the committee shall be submitted to the GSA Secretariat by the Commission. The letter shall contain the following information:

(1) An explanation of why the committee is essential to the conduct of NRC business and is in the public interest;

(2) An explanation of why the committee's functions cannot be performed by NRC, another existing NRC advisory committee, or other means (such as a public hearing); and

(3) A description of NRC's plan to attain balanced membership on the committee.

For purposes of attaining balance in an NRC advisory committee's membership, the Commission shall consider for membership interested persons and groups with professional, technical, or personal qualifications or experience to contribute to the functions and tasks to be performed.

(b) Each proposed committee charter submitted for review pursuant to paragraph (a) of this section shall contain the following information:

(1) The committee's official designation;

(2) The committee's objectives and the scope of its activity;

(3) The period of time necessary for the committee to carry out its purposes;

(4) The NRC official to whom the committee will report;

(5) The NRC office responsible for providing support for the committee;

(6) A description of the duties for which the committee will be responsible, and if such duties are not solely advisory, a specification of the authority for the functions that are not advisory;

(7) The estimated annual operating costs, in dollars and man-years, for the committee;

(8) The estimated number and frequency of committee meetings; and

(9) The committee's termination date, if less than two years from the date of the committee's establishment.

The date the charter is filed pursuant to § 7.8 shall be added to the charter when such filing takes place.

(c)(1) A subcommittee that does not function independently of its parent advisory committee shall be subject to the requirements of this part, except that it shall not be subject to the requirements of paragraphs (a) and (b) of this section. Such a subcommittee shall not, however, be subject to the requirements of this part with respect to any meeting of its members devoted solely to a function described in § 7.2(c)(3)(viii).

(2) The requirements of this part, including the requirements of paragraphs (a) and (b) of this section, shall apply to any subcommittee that functions independently of the parent advisory committee (such as by making recommendations directly to the agency rather than to the parent advisory committee), regardless of whether the subcommittee's members are drawn in whole or in part from the parent advisory committee.

(d) After the GSA Secretariat has notified the Commission of the results of its review of a proposal to establish or utilize an NRC advisory committee, submitted pursuant to paragraph (a) of this section, the Commission shall notify the GSA Secretariat in writing whether the advisory committee is actually being established. Filing of the advisory committee charter pursuant to § 7.8 shall be deemed to fulfill this notification requirement. If the advisory committee is not being established, the Commission shall so advise the GSA Secretariat in writing, stating whether NRC intends to take any further action with respect to the proposed advisory committee.

(e) The date of filing of an advisory committee charter pursuant to § 7.8 shall appear on the face of the charter and shall constitute the date of establishment, renewal, or reestablishment of the committee.

§ 7.6 Amendments to advisory committee charters.

(a) Final authority for amending the charter of an NRC advisory committee established or utilized by the NRC is vested in the Commission.

(b) Any proposed minor technical changes made to a current charter for an NRC advisory committee whose establishment is required or authorized by statute or by Executive Order of the President shall be coordinated with the General Counsel to ensure that they are consistent with the applicable statute or Executive Order. When the statute or Executive Order that directed or authorized the establishment of an advisory committee is amended to change the language that has been the basis for establishing the advisory committee, those sections of the current charter affected by the statute or Executive Order shall also be amended, and the amended charter shall be filed as specified in § 7.8.

(c)(1) The charter of an NRC advisory committee established under general agency authority may be amended when the Commission determines that the existing charter no longer reflects the objectives or functions of the committee. Such changes may be minor (such as revising the name of the advisory committee or modifying the estimated number or frequency of meetings), or they may be major (such as revising the objectives or composition of the committee). The procedures specified in paragraph (b) of this section shall be used in the case of charter amendments involving minor changes.

(2) In the case of a major amendment to the charter of an advisory committee established under general agency authority, a letter requesting review of the proposed amendment and transmitting the proposed amended charter shall be submitted to the GSA Secretariat. The letter shall explain the purpose of the changes and why they are necessary.

(3) A committee charter that has been amended pursuant to this paragraph is subject to the filing requirements set forth in § 7.8.

(4) Amendment of an existing advisory committee charter pursuant to this paragraph does not constitute renewal of the committee for purposes of § 7.7.

§7.7 Termination, renewal, and rechartering of advisory committees.

(a) Except as provided in paragraph (b)(1) of this section, each NRC advisory committee shall terminate two years after it is established, reestablished, or renewed, unless—

(1) It has been terminated sooner;

(2) It has been renewed or reestablished before the end of such period in accordance with the procedures set forth in paragraph (b) of this section; or

(3) Its duration has been otherwise designated by law.

The NRC Committee Management Officer shall notify the GSA Secretariat in writing of the effective date of termination of any advisory commitee that has been terminated by the NRC.

(b)(1) An NRC advisory committee that is established by statute shall require rechartering by the filing of a new charter every 2 years after the date of enactment of the statute establishing the committee. If a new charter is not filed, the committee is not terminated, but it may not meet or take any actions.

(2) Any other NRC advisory committee may be renewed, provided that such renewal is carried out in compliance with the procedures set forth in §7.5 at least 30 and not more than 60 days before the committee would otherwise terminate; except that an advisory committee established by the President may be renewed by appropriate action of the President and the filing of a new charter. Renewal of an NRC advisory committee shall not be deemed to terminate the appointment of any committee member who was previously appointed to serve on the committee.

§7.8 Charter filing requirements.

(a) Except as provided in paragraph (b) of this section, an NRC advisory committee may not operate, meet, or take any action unless a copy of the committee's charter has been filed with (1) the Committee on Environment and Public Works of the United States Senate, and the Committee on Interior and Insular Affairs and the Committee on Energy and Commerce of the United States House of Representatives; (2) the Library of Congress, Exchange and Gift Division, Federal Documents Section, Federal Advisory Committee Desk, Washington, DC 20540; and (3) the GSA Secretariat. The copy filed with the GSA Secretariat shall indicate the Congressional filing date.

(b) When either the President or the Congress establishes an advisory committee that advises the President and for which NRC is responsible, the Commission shall—

(1) File the committee's charter with the GSA Secretariat;

(2) File a copy of the committee's charter with the Library of Congress at the address listed in paragraph (a) of this section; and

(3) If specifically directed by law, file with the Congressional Committees listed in paragraph (a) of this section a copy of the charter that shows its date of filing with the GSA Secretariat.

(c) For purposes of the filing requirements established by this section, the filing date of an advisory committee charter shall be the date on which the charter, or a copy of the charter where appropriate, is offered for filing at the office in which it is required to be filed (in the case of hand delivery), or on which it is deposited in the mail (in the case of delivery by mail).

(d) The charter filing requirements established by this section are subject to the public notice requirements of §7.9.

§7.9 Public notice of advisory committee establishment, reestablishment, or renewal.

(a) After the Commission has received the GSA Secretariat's response to a request (in accordance with §7.5) for review of a proposal to establish, reestablish, renew, or utilize an NRC advisory committee, the Commission shall publish a notice in the FEDERAL REGISTER that the committee is being established, reestablished, renewed, or utilized. In the case of a new committee, the notice shall also describe the nature and purpose of the committee and shall include a statement that the committee is necessary and in the public interest. This notice requirement does not apply to any committee whose establishment is required by statute or which is established by Executive Order of the President.

(b) Notices required to be published pursuant to paragraph (a) of this section shall be published at least 15 calendar days before the committee charter is filed pursuant to § 7.8, except that the GSA Secretariat may approve less than 15 days for good cause shown. The 15-day advance notice requirement does not apply to committee renewals, notices of which may be published concurrently with the filing of the charter.

§ 7.10 The NRC Advisory Committee Management Officer.

(a) The Chairman of the Commission shall appoint an NRC Advisory Committee Management Officer to carry out the functions specified in paragraph (b) of this section.

(b) The NRC Advisory Committee Management Officer shall—

(1) Carry out all responsibilities relating to NRC advisory committees delegated to such officer by the Commission;

(2) Ensure that administrative guidelines and management controls are issued that apply to all NRC advisory committees;

(3) Exercise control and supervision over the establishment, procedures, and accomplishments of NRC advisory committees;

(4) Assemble and maintain the reports, records, and other papers of any such committee during this existence;

(5) Carry out, on behalf of NRC, the provisions of the Freedom of Information Act (5 U.S.C. 552) and NRC's Freedom of Information Act Regulations (10 CFR Part 9, Subpart A) with respect to such reports, records, and other papers;

(6) Ensure that, subject to the Freedom of Information Act and NRC's Freedom of Information Act Regulations, copies of the records, reports, transcripts minutes, appendices, working papers, drafts, studies, agenda, or other documents which were made available to or prepared for or by each NRC advisory committee shall be available for public inspection and copying at the NRC Public Document Room until the advisory committee ceases to exist;

(7) Ensure that, subject to the Freedom of Information Act and NRC's Freedom of Information Act Regulations, at least eight copies of each report made by each NRC advisory committee and, where appropriate, background papers prepared by consultants, shall be filed with the Library of Congress;

(8) Ensure that NRC keeps such records as will fully disclose the disposition of any funds that may be at the disposal of NRC advisory committees and the nature and extent of their activities; and

(9) Ensure that NRC keeps such other records and provides such support services as are required by § 7.22.

(c) For purposes of paragraph (b) of this section, the term "records" includes (but is not limited to):

(1) A set of approved charters and membership lists for each NRC advisory committee;

(2) Copies of NRC's portion of the President's annual report to the Congress on Federal advisory committees required by section 6(c) of the Act;

(3) NRC guidelines on committee management operations and procedures as maintained and updated; and

(4) NRC determinations to close advisory committee meetings made pursuant to § 7.15.

[54 FR 26948, June 27, 1989; 54 FR 28554, July 6, 1989; 54 FR 31646, Aug. 1, 1989]

§ 7.11 The Designated Federal Officer.

(a) The Chairman of the Commission shall appoint a Designated Federal Officer for each NRC advisory committee and its subcommittees. The individual holding this position must be employed by the Federal Government on either a full-time or a permanent part-time basis.

(b) All meetings of an NRC advisory committee must be convened or approved by the committee's Designated Federal Officer, and the agenda for each committee meeting (except a meeting of a Presidential advisory committee) must be approved by that individual.

(c) An NRC advisory committee may not hold a meeting in the absence of its Designated Federal Officer.

(d) It shall also be the responsibility of the Designated Federal Officer to—

(1) Attend all meetings of the committee for which he or she has been appointed;

(2) Adjourn the meetings of the committee when such adjournment is in the public interest;

(3) Chair the meetings of the committee when so directed by the Commission;

(4) Ensure compliance with the requirements of § 7.13 regarding minutes of meetings of the committee; and

(5) Provide to the NRC Public Document Room copies of committee documents required to be maintained for public inspection and copying pursuant to § 7.14(b).

[54 FR 26948, June 27, 1989; 54 FR 28554, July 6, 1989]

§ 7.12 Public participation in and public notice of advisory committee meetings.

(a) Each meeting of an NRC advisory committee shall be held at a reasonable time and in a place reasonably accessible to the public. The size of the meeting room must be sufficient to accomodate advisory committee members, committee or agency staff, and interested members of the public; except that, the provisions of this paragraph shall not apply where an entire NRC advisory committee meeting has been closed pursuant to § 7.15.

(b) Any member of the public who wishes to do so shall be permitted to file a written statement with an NRC advisory committee regarding any matter discussed at a meeting of the committee. The committee chairman may also permit members of the public to speak at meetings of the committee in accordance with procedures established by the committee.

(c) Except when the President or his designee determines in writing that no notice should be published for reasons of national security, at least 15 days prior to an NRC advisory committee meeting, a notice that includes the following information shall be published in the Federal Register:

(1) The exact name of the advisory committee as chartered;

(2) The time, date, place, and purpose of the meeting;

(3) A summary of the agenda of the meeting; and

(4) Whether all or part of the meeting is open to the public.

If any part of the meeting is closed, the notice shall provide the reasons for the closure, citing the specific matter that has been determined to justify the closure under § 7.15.

(d) In exceptional circumstances, less than 15 days notice of an advisory committee meeting may be given, provided that there is as much prior notice as possible and the reasons for the shorter time are included in the committee meeting notice published in the Federal Register.

(e) In addition to notice required by paragraph (c) of this section, the NRC may also use other forms of notice, such as public releases and notice by mail, to inform the public of advisory committee meetings. To that end, the Designated Federal Officer of each NRC advisory committee will, to the extent practicable, maintain lists of people and organizations interested in that advisory committee and notify them of meetings by mail.

§ 7.13 Minutes of advisory committee meetings.

(a) Detailed minutes shall be kept of each NRC advisory committee meeting. The minutes shall include the following information:

(1) The time, date, and place of the meeting;

(2) A list of the attendees at the meeting who are advisory committee members or staff, agency employees, or members of the public who presented oral or written statements;

(3) An estimate of the number of other members of the public who were present;

(4) The extent of public participation; and

(5) An accurate description of each matter discussed during the meeting and its resolution, if any, by the committee.

(b) The minutes of an NRC advisory committee meeting shall include a copy of each report or other document received, issued, or approved by the committee in connection with the meeting. If it is impracticable to attach a document to the minutes, the minutes shall describe the document in sufficient detail to permit it to be identified readily.

(c) The chairperson of an NRC advisory committee shall certify to the accuracy of the minutes of each of the committee's meetings. In the case of a subgroup of an advisory committee, the chairperson of the subgroup shall certify to the accuracy of the minutes.

(d) A verbatim transcript of an advisory committee meeting may be substituted for minutes required by this section, providing that the use of such a transcript is in accordance with the requirements of paragraphs (a), (b), and (c) of this section.

§ 7.14 Public information on advisory committees.

(a) The Nuclear Regulatory Commission shall maintain systematic information on the nature, functions, and operations of each NRC advisory committee. A complete set of the charters of NRC advisory committees and copies of the annual reports required by § 7.17(a) shall be maintained for public inspection in the NRC Public Document Room.

(b) Subject to the provisions of the Freedom of Information Act (5 U.S.C. 552) and NRC's Freedom of Information Act Regulations (10 CFR Part 9, Subpart A), copies of NRC advisory committees' records, reports, transcripts, minutes, appendices, working papers, drafts, studies, agenda, and other documents shall be maintained for public inspection and copying in the NRC Public Document Room.

§ 7.15 Procedures for closing an NRC advisory committee meeting.

(a) To close all or part of a meeting of an NRC advisory committee, the committee shall submit a written request for closure to the Chairman of the Commission, citing specific matter listed in the Government in the Sunshine Act (5 U.S.C. 552b), as implemented by 10 CFR 9.104, to justify the closure. The request shall provide the Chairman sufficient time for review in order to make a determination prior to publication of the meeting notice pursuant to § 7.12.

(b) The General Counsel shall review all requests to close meetings of NRC advisory committees.

(c) If the Chairman of the Commission agrees that the request is consistent with the policies of this part, a determination shall be issued in writing that all or part of the meeting will be closed. The determination shall include a statement of the reasons for the closing.

(d) Except when the President or his designee determines in writing that no notice should be published for reasons of national security, the Chairman of the Commission shall make a copy of the determination to close all or part of an NRC advisory committee meeting available to the public upon request, and shall state the reasons why all or part of the meeting is closed, citing the specific matter listed in the Government in the Sunshine Act (as implemented by 10 CFR 9.104) in the meeting notice published in the FEDERAL REGISTER pursuant to § 7.12.

(e) The Chairman of the Commission may delegate the Chairman's functions under paragraphs (c) and (d) of this section to such officer of the Commission as the Chairman considers appropriate. The General Counsel shall review any determination to close a meeting made by a delegate.

§ 7.16 Annual comprehensive review.

(a) The Chairman of the Commission shall conduct an annual comprehensive review of the activities and responsibilities of each NRC advisory committee to determine whether the committee—

(1) Is carrying out its purposes or, consistent with the provisions of applicable statutes, its responsibilities should be revised.

(2) Should be merged with another advisory committee.

(3) Should be terminated.

(b) The comprehensive review required by paragraph (a) of this section shall include consideration of such information regarding the committee as is required for the Commission's annual report to the GSA Secretariat pursuant to § 7.27(a) and such other information as may be requested from the Committee by the NRC Advisory Committee Management Officer. The results of such review shall be included in the annual report to the GSA Secretariat.

(c) If, as a result of the review required by this section, the Commission determines that an advisory committee is no longer needed, the committee shall be terminated; except that in the case of an advisory committee established by an Act of Congress or the President, the committee's termination shall be recommended to the President or the Congress, as the case may be.

§7.17 Reports required for advisory committees.

(a) The Commission shall furnish a report on the activities of NRC advisory committees annually to the Administrator and the GSA Secretariat. The report shall be on a fiscal year basis. It shall contain such information regarding NRC advisory committees as is required by section 6(c) of the Act for the President's annual report to the Congress and shall be consistent with instructions provided by the GSA Secretariat. A copy of the report shall be placed in the NRC Public Document Room.

(b) Any NRC advisory committee holding closed meetings shall issue a report, at least annually, setting forth a summary of its activities consistent with the policy of the Government in the Sunshine Act (5 U.S.C. 552b), as implemented by 10 CFR 9.104. A copy of the report shall be placed in the NRC Public Document Room.

(c) Subject to the Freedom of Information Act (5 U.S.C. 552) and NRC's Freedom of Information Act Regulations (10 CFR Part 9, Subpart A), eight copies of each report made by an advisory committee, including any report on closed meetings pursuant to paragraph (b) of this section, and, where appropriate, background papers prepared by consultants, shall be filed for public inspection and use with the Library of Congress, Exchange and Gift Division, Federal Documents Section, Federal Advisory Committee Desk, Washington, DC 20540.

§7.18 Compensation and expense reimbursement of advisory committee members, staffs, and consultants.

(a) Except where otherwise provided by law, the Commission may accept the gratuitous services of an NRC advisory committee member, staff member, or consultant who agrees in advance to serve without compensation.

(b)(1) Subject to the provisions of paragraph (b)(2) of this section, if the Commission determines that compensation of a member of an NRC advisory committee is appropriate, the amount that will be paid shall be fixed by the Chairman of the Commission at a rate that is the daily equivalent of a rate of NRC's General Salary Schedule, unless the member is appointed as a consultant and compensated at a rate applicable to NRC consultants. (See NRC Manual for NRC's General Salary Schedule and rates applicable to NRC consultants.)

(2) In determining an appropriate rate of pay for a member of an NRC advisory committee, the Chairman of the Commission shall give consideration to the significance, scope, and technical complexity of the matters with which the advisory committee is concerned and the qualifications required of the committee member; provided that the Chairman may not set the rate of pay for an NRC advisory committee member higher than the daily equivalent of the maximum rate for a GG-15 under NRC's General Salary Schedule, unless a higher rate is mandated by statute or the Commission itself has determined that a higher rate is justified and necessary. The Commission may not delegate the responsibility for making a determination that such a higher rate of pay is necessary and justified for an NRC advisory committee member, and such a determination must be reviewed annually.

(3) An advisory committee member may not be paid at a rate higher than the daily equivalent of the maximum rate for a GG-18 under NRC's General Salary Schedule.

(c)(1) Each NRC advisory committee staff member may be paid at a rate that is the daily equivalent of a rate of

NRC's General Salary Schedule in which the staff member's position would appropriately be placed.

(2) A staff member of an NRC advisory committee may not be paid at a rate higher than the daily equivalent of the maximum rate for a GG-15 under NRC's General Salary Schedule, unless the Chairman of the Commission determines that the staff member's position would appropriately be placed at a grade higher than GG-15; provided that in establishing rates of compensation, the Chairman shall comply with any applicable statutes, regulations, Executive Orders, and administrative guidelines.

(3) A determination to set the rate of pay of a staff position at a grade higher than GG-15 under the NRC's General Salary Schedule rate of pay shall be reviewed annually by the Chairman of the Commission.

(4) A Federal employee may serve as a staff member of an NRC advisory committee only with the knowledge of the Designated Federal Officer for the committee and the approval of the employee's direct supervisor. A staff member who is not otherwise a Federal employee shall be appointed in accordance with applicable agency procedures, following consultation with the advisory committee.

(d) The following factors shall be considered in determining an appropriate rate of pay for a consultant to an NRC advisory committee:

(1) The qualifications required of the consultant, and

(2) The significance, scope, and technical complexity of the work for which his services are required;

Provided that the rate of pay for an NRC advisory committee consultant may not be higher than the maximum rate of pay applicable to NRC consultants. In establishing such a rate of pay, NRC shall comply with any applicable statutes, regulations, Executive Orders, and administrative guidelines.

(e) A member or staff member of an NRC advisory committee engaged in the performance of duties away from his or her home or regular place of business may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703, title 5, United States Code, for persons employed intermittently in the Government service.

(f) Nothing in this section shall—

(1) Prevent any full-time Federal employee who provides services to an NRC advisory committee from receiving compensation at a rate at which he or she would otherwise be compensated as a full-time Federal employee.

(2) Prevent any individual who provides services to an NRC advisory committee, and who immediately before providing such services was a full-time Federal employee, from receiving compensation at a rate at which he or she was compensated as a full-time Federal employee.

(3) Affect a rate of pay or a limitation on a rate of pay that is specifically established by law or a rate of pay established under the NRC's General Salary Schedule and evaluation system (see NRC Manual).

§ 7.19 Handicapped members of advisory committees.

An NRC advisory committee member who is blind or deaf or otherwise handicapped may be provided services by a personal assistant for handicapped employees while performing advisory committee duties, if the member—

(a) Qualifies as a handicapped individual as defined by section 501 of the Rehabilitation Act of 1973 (29 U.S.C. 794); and

(b) Does not otherwise qualify for assistance under 5 U.S.C. 3102 by reason of being an employee of NRC.

§ 7.20 Conflict of interest reviews of advisory committee members' outside interests.

The Designated Federal Officer of each NRC advisory committee and the General Counsel shall review the interests and affiliations of each member of the Designated Federal Officer's advisory committee annually, and upon the commencement and termination of the member's appointment to the committee, for the purpose of ensuring that such appointment is consistent with the laws and regulations on conflict of interest applicable to that member.

§ 7.21 Cost of duplication of documents.

Copies of the records, reports, transcripts, minutes, appendices, working papers, drafts, studies, agenda, or other documents that were made available to or prepared for or by an NRC advisory committee shall be made available to any person at the actual cost of duplication prescribed in Part 9 of this chapter. (For availability of information on advisory committees, see § 7.14.)

§ 7.22 Fiscal and administrative responsibilities.

(a) The Controller shall keep such records as will fully disclose the disposition of any funds which may be at the disposal of NRC advisory committees.

(b) The Office of Information Resources Management shall keep such records as will fully disclose the nature and extent of activities of NRC advisory committees.

(c) NRC shall provide support services (including staff support and meeting space) for each advisory committee established by or reporting to it unless the establishing authority provides otherwise. Where any such advisory committee reports to another agency in addition to NRC, only one agency shall be responsible for support services at any one time, and the establishing authority shall designate the agency responsible for providing such services.

PART 8—INTERPRETATIONS

Sec.

8.1 Interpretation of section 152 of the Atomic Energy Act of 1954; opinion of the General Counsel.
8.2 Interpretation of Price-Anderson Act, section 170 of the Atomic Energy Act of 1954.
8.3 [Reserved]
8.4 Interpretation by the General Counsel: AEC jurisdiction over nuclear facilities and materials under the Atomic Energy Act.
8.5 Interpretation by the General Counsel of § 73.55 of this chapter; illumination and physical search requirements.

Authority: Secs. 152, 161, 68 Stat. 944, 948, as amended; 42 U.S.C. 2182, 2201.

§ 8.1 Interpretation of section 152 of the Atomic Energy Act of 1954; opinion of the General Counsel.

(a) Inquiries have been received as to the applicability of the provisions of section 152 of the Atomic Energy Act of 1954 (68 Stat. 944) to inventions or discoveries made or conceived in the course of activities under licenses issued by the Atomic Energy Commission.

(b) In my [General Counsel, U.S. Atomic Energy Commission] opinion a license issued by the Atomic Energy Commission is not a "contract, subcontract, arrangement or other relationship with the Commission" as those terms are used in section 152 of the act. Hence, the mere fact that an invention or discovery is made by a licensee in the course of activities authorized by a license would not give the Commission rights under section 152 with respect to such invention or discovery. On the other hand, if a licensee has entered into a "contract, subcontract, arrangement or other relationship with the Commission," inventions or discoveries made or conceived by the licensee under the contract or other relationship would come within the purview of section 152.

(c) As used in this section, "license" means a license issued pursuant to Chapter 6 (Special Nuclear Material), 7 (Source Material), 8 (Byproduct Material) or 10 (Atomic Energy Licenses) of the Atomic Energy Act of 1954, or a construction permit issued pursuant to section 185 of the act.

[21 FR 1414, Mar. 3, 1956]

§ 8.2 Interpretation of Price-Anderson Act, section 170 of the Atomic Energy Act of 1954.

(a) It is my opinion that an indemnity agreement entered into by the Atomic Energy Commission under the authority of the Atomic Energy Act of 1954 (42 U.S.C. 2011, et seq.), hereafter cited as "the Act," as amended by Pub. L. 85-256 (the "Price-Anderson Act") 42 U.S.C. 2210 indemnifies persons indemnified against public liability for bodily injury, sickness, disease or death, or loss of or damage to property, or for loss of use of property caused outside the United States by a nuclear incident occurring within the United States.

(b) Section 170 authorizes the Commission to indemnify against "public liability" as defined in section 11(u) of the Act.[1] Coverage under the Act therefore is predicated upon "public liability," and requires (1) "legal liability" for (2) a "nuclear incident." Determination of the Act's coverage, therefore, necessitates a finding that these two elements are present.

(c) In the case of damage outside of the United States caused by a nuclear facility based in the United States there would be a "nuclear incident" as defined in section 11(o) since there would be an "occurrence within the United States causing * * * damage."[2] The "occurrence" would be "within the United States" since "occurrence" is intended by the Act to be "that event at the site of the licensed activity * * * which may cause damage rather than the site where the damage may perhaps be caused." (S. Rep. 296, 85th Cong., 1st Sess., p. 16 1957) (hereafter cited as Report). In Section 11(o) an "occurrence" is that which causes damage. It would be, therefore, an event taking place at the site. This definition of "occurrence" is referred to in the Report at page 22 and is crucial to the Act's placing of venue under section 170(e).[3] In its definition of "nuclear incident." The Act makes no limitation upon the place where the damage is received but states only that the "occurrence" must be within the United States.

(d) Similarly, the requirement of "legal liability" would be met. The words of the Act impose no limitation that the liability be one for damage caused in the United States but, on the contrary, are exceedingly broad permitting indemnification for "any legal liability." In the most exhaustive study of the subject, it is stated that the phrase "any legal liability" indicates that liability for damage outside the United States is covered by the Act. Atomic Industrial Forum, Financial Protection Against Atomic Hazards 61 n. 355 (1957).

(e) Thus the precise language of the Act provides coverage for damage ensuing both within and without the United States arising out of an occurrence within the United States. There would be no occasion for doubt were it not for a single statement contained in the Report of the Joint Committee on Atomic Energy on the Price-Anderson Act. The Report states, at p. 16 that "[i]f there is anything from a nuclear incident at the licensed activity which causes injury abroad, or if there is any activity abroad which causes further injury in the United States the situation will require further investigation at that time." This sentence follows an explicit and lengthy statement that the "occurrence" is an event at the site of the activity:

> * * * The occurrence which is the subject of this definition is that event at the site of the licensed activity, or activity for which the Commission has entered into a contract, which may cause damage, rather than the site where the damage may perhaps be

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[1] SEC. 11u. "The term 'public liability' means any legal liability arising out of or resulting from a nuclear incident, except claims under State or Federal Workmen's Compensation Acts of employees of persons indemnified who are employed at the site of and in connection with the activity where the nuclear incident occurs, and except for claims arising out of an act of war. 'Public Liability' also includes damage to property of persons indemnified: *Provided*, That such property is covered under the terms of the financial protection required, except property which is located at the site of and used in connection with the activity where the nuclear incident occurs."

[2] SEC. 11*o*. "The term 'nuclear incident' means any occurrence within the United States causing bodily injury, sickness, disease, or death, or loss of or damage to property, or for loss of use of property, arising out of or resulting from the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material: * * *"

[3] "In order to provide a framework for establishing the limitation of liability, the Commission or any person indemnified is permitted to apply to the appropriate district court of the United States which has venue in bankruptcy matters over the site of the nuclear incident. Again it should be pointed out that the site is where the occurrence takes place which gives rise to the liability, not the place where the damage may be caused * * * " Report. p. 22.

> caused. This site must be within the United States. The suggested exclusion of facilities under license for export was not accepted. This is because the definition of "nuclear incident" limits the occurrence causing damage to one within the United States. It does not matter what license may be applicable if the occurrence is within the United States. If there is anything from a nuclear incident at the licensed activity which causes injury abroad or if there is any activity abroad which causes further injury in the United States the situation will require further investigation by the Congress at that time * * *

Read literally, the last sentence would seem inconsistent with the preceding statement. It is, however, possible to read the sentence as consistent with the preceding statement if it is taken as indicating a recognition by Congress of the fact that the statutory limitation of liability to $500,000,000 would probably not limit claims by foreign residents to that amount in foreign courts and that therefore the persons indemnified were not fully protected against bankrupting claims, one of the primary purposes of the bill.[4]

(f) The point in question received scant consideration during the hearings preceding adoption of the bill held by the Joint Committee on Atomic Energy. A summary of the study of the Atomic Industrial Forum, cited above, was introduced into the record of the hearing and included a conclusion that the provisions of the bill seemed to cover the situation.[5] That conclusion would seem entitled to more than ordinary weight since the Forum study received the careful consideration of the Joint Committee,[6] and the study referenced a statement from the 1956 Report very similar to the confusing statement in the 1957 Report noted above.[7]

(g) There was also a rather ambiguous colloquy in the hearings between Representative Cole and Mr. Charles Haugh in which Representative Cole indicated that the Joint Committee

> "* * * will do pretty well if we successfully protect the American people and property owners in this country without worrying about those that live abroad."[8]

(h) Congress, in enacting the Price-Anderson Indemnity Act added to section 2 of the Atomic Energy Act of 1954, a new subsection which stated, inter alia:

> In order * * * to encourage the development of the atomic energy industry, * * * the United States may make funds available for a portion of the damages suffered by the public from nuclear incidents and may limit the liability of those persons liable for such losses.

This statutory purpose is frustrated if the atomic energy industry is not protected from bankrupting liabilities for damages caused abroad by an accident occurring in the United States.[9] In the

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[4] Atomic Industrial Forum, Financial Protection Against Atomic Hazards, The International Aspects, p. 52 (1959).

[5] Hearings before the Joint Committee on Atomic Energy, Governmental Indemnity and Reactor Safety, 85th Cong., 1st Sess., p. 181 (1957) (hereinafter referred to as "Hearings.")

[6] Hearings, p. 168.

[7] Hearings, p. 182.

[8] Hearings, p. 97. It is significant to note that Mr. Haugh stated at that point the problem of the reactor operator who is concerned with any type of liability. He noted that the insurance contracts would cover "* * * the instance where * * * something happen[ed] out of the country and a suit is brought in the United States on that."

[9] The Atomic Industrial Forum study notes that "[T]o be adequate, the governmental indemnity must cover industry's liability to residents of the countries who suffer as a result of an accident at an installation based in the United States." p. 61. This is certainly the case and one of the major Congressional purposes is frustrated should the Act be said to be unclear on this point. The principal reason for the conclusion that there is coverage reached in the Forum study is the fact that Price-Anderson provides indemnity for "any legal liability." Arthur Murphy, Director of the study, in a recent article, has stated that the confusing sentence in the Report is "* * * inconsistent with the flat coverage of any legal liability by the indemnity." Murphy, Liability for Atomic Accidents and Insurance, in Law and Administration in Nuclear Energy 75 (1959). In the testimony before the Joint Committee last year, Professor Samuel D. Estep, one of three authors of the comprehensive study of Atoms and the Law apparently relying upon the legislative history, stated

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Report, the Joint Committee on Atomic Energy made explicit mention of the fact that the private insurance to be provided for reactor operators included coverage for damage in Canada and Mexico and, at another point, noted the Committee's hope that the insurance contract in its final form would cover the same scope as the bill.[10]

(i) It is my opinion that since the language of the Act draws no distinction between damage received in the United States and that received abroad, none can properly be drawn. To read the Act as imposing such a limitation in the absence of statutory direction and in the light of an avowed Congressional intention to encourage the development of the atomic energy industry would be unwarranted. The confusing sentence cited in the Report must, therefore, be read consistently with the language of the Act in the manner suggested above, i.e., as recognizing Congressional inability to limit foreign liability, or must be ignored as inconsistent with the broad coverage of the statutory language.

[25 FR 4075, May 7, 1960]

§ 8.3 [Reserved]

§ 8.4 Interpretation by the General Counsel: AEC jurisdiction over nuclear facilities and materials under the Atomic Energy Act.

(a) By virtue of the Atomic Energy Act of 1954, as amended,[11] the individual States may not, in the absence of an agreement with the Atomic Energy Commission, regulate the materials described in the Act from the standpoint of radiological health and safety. Even States which have entered into agreements with the AEC lack authority to regulate the facilities described in the Act, including nuclear power plants and the discharge of effluents from such facilities, from the standpoint of radiological health and safety.

(b) The Atomic Energy Act of 1954 sets out a pattern for licensing and regulation of certain nuclear materials and facilities on the basis of the common defense and security and radiological health and safety. The regulatory pattern requires, in general, that the construction and operation of production facilities (nuclear reactors used for production and separation of plutonium or uranium-233 or fuel reprocessing plants) and utilization facilities (nuclear reactors used for production of power, medical therapy, research, and testing) and the possession and use of byproduct material (radioisotopes), source material (thorium and uranium ores), and special nuclear material (enriched uranium and plutonium, used as fuel in nuclear reactors), be licensed and regulated by the Commission.[12] In carrying out its statutory responsibilities for the protection of the public health and safety from radiation hazards and for the promotion of the common defense and security, the AEC has promulgated regulations which establish requirements for the issuance of licenses (Parts 30-36, 40,

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that the problem of a reactor accident in the United States causing damage in a foreign country was unclear, presumably since he considered the phrase "any legal liability" directed at a different problem. Hearings before the Joint Committee on Atomic Energy, Indemnity and Reactor Safety, 86th Cong., 1st Sess., p. 77 (1959); Stason Estep, and Pierce, Atoms and the Law, 577 (1959). Professor Estep stated that there "surely ought to be" coverage and suggested a clarifying amendment. His statement that the phrase "any legal liability" covers only the question of time restrictions for claims seems to me erroneous since the language used, "any legal liability," seems intentionally broad. Additionally, should this very narrow reading be given to admittedly broad statutory language, the Congressional purpose would be frustrated.

[10] Report, p. 11.

[11] Pub. L. 83-703, 68 Stat. 919.

[12] The terms "byproduct material," "source material," and "special nuclear material" are defined in the Atomic Energy Act, sections 11e, 11z, and 11aa, respectively. The terms "production facility" and "utilization facility" are defined in sections 11v and 11cc of the Act, respectively.

50, 70, 71, and 100 of this chapter) and specify standards for radiation protection (Part 20 of this chapter).

(c) The Atomic Energy Act of 1954 had the effect of preempting to the Federal Government the field of regulation of nuclear facilities and byproduct, source, and special nuclear material. Whatever doubts may have existed as to that preemption were settled by the passage of the Federal-State amendment to the Atomic Energy Act of 1954 in 1959.[13]

(d) Prior to 1954, all nuclear facilities and the special nuclear material produced by or used in them were owned by the AEC.[14] This Federal monopoly of atomic energy activities was due in large part to the use of atomic energy materials and facilities in our national weapons program, and the large capital investment required for their development. The Atomic Energy Act of 1954 permitted private ownership of nuclear facilities for the first time, but only under a comprehensive, pervasive system of Federal regulation and licensing. That Act recognized no State responsibility or authority over such facilities and materials except the States' traditional regulatory authority over generation, sale, and transmission of electric power produced through the use of nuclear facilities.[15] As interest grew in the private construction of facilities and the use of atomic energy materials, and the numbers of persons qualified in the field increased, questions arose as to the role State authorities should play with regard to the public health and safety aspects of such activities. Several bills were introduced with respect to Federal-State cooperation in 1956 and 1957.[16] An AEC proposed bill which would have authorized concurrent radiation safety standards to be enforced by the States was forwarded to the Joint Committee on Atomic Energy in 1957, but was never reported out. Finally, in 1959, legislation was enacted whose purpose was to promote an orderly regulatory pattern between the Federal and State governments with respect to regulation of byproduct, source, and special nuclear material, while avoiding dual regulation (see section 274a). That legislation added section 274, the so-called Federal-State amendment, to the Atomic Energy Act.

(e) Section 274 (42 U.S.C. 2021) authorizes the Commission to enter into an agreement with the Governor of any State providing for the discontinuance of regulatory authority of the Commission with respect to byproduct materials, source materials, and special nuclear materials in quantities not sufficient to form a "critical mass." However, section 274c (42 U.S.C. 2021(c)) provides that the Commission shall retain authority and responsibility with respect to the regulation of:

(1) The construction and operation of production or utilization facilities (note: this includes construction and operation of nuclear powerplants);

(2) The export and import of byproduct, source or special nuclear material or production or utilization facilities;

(3) The disposal into the ocean of waste byproduct, source or special nuclear materials; and

(4) The disposal of such other byproduct, source or special nuclear material as the Commission determines should, because of the hazards or potential hazards thereof, not be so disposed of without a Commission license.

(f) The amendment, in providing for the discontinuance of some of the AEC's regulatory authority over source, by-product and special nuclear material in States which entered into agreements with the AEC, made clear that there should be no "dual regulation" with respect to those materials for the purpose of protection of the public health and safety from radiation hazards.

(g) Section 274b of the Atomic Energy Act (42 U.S.C. 2021(b)) states that:

> During the duration of such an agreement it is recognized that the State shall have authority to regulate the materials covered by

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[13] Pub. L. 86-373, 73 Stat. 688.

[14] Atomic Energy Act of 1946, Pub. L. 79-585, 60 Stat. 755.

[15] Sec. 271, 42 U.S.C. 2018.

[16] S. 4298 and H.R. 8676, 84th Cong., second session; S. 53, 85th Cong., first session.

> the agreement for the protection of the public health and safety from radiation hazards.

Section 274k (42 U.S.C. 2021(k)) states:

> Nothing in this section shall be construed to affect the authority of any State or local agency to regulate activities for purposes other than protection against radiation hazards.

(h) In its comments on the bill that was enacted as section 274, the Joint Committee on Atomic Energy commented that:

> It is not intended to leave any room for the exercise of dual or concurrent jurisdiction by States to control radiation hazards by regulating byproduct, source, or special nuclear materials. The intent is to have the material regulated and licensed either by the Commission, or by the State and local governments, but not by both.[17]

In explaining section 274k, the Joint Committee said:

> As indicated elsewhere, the Commission has exclusive authority to regulate for protection against radiation hazards until such time as the State enters into an agreement with the Commission to assume such responsibility.[18]

(i) It seems completely clear that the Congress, in enacting section 274, intended to preempt to the Federal Government the total responsibility and authority for regulating, from the standpoint of radiological health and safety, the specified nuclear facilities and materials; that it stated that intent unequivocally; and that the enactment of section 274 effectively carried out the Congressional intent, subject to the arrangement for limited relinquishment of AEC's regulatory authority and assumption thereof by states in areas permitted, and subject to conditions imposed, by section 274.[19]

(j) Thus, under the pattern of the Atomic Energy Act, as amended by section 274, States which have not entered into a section 274 agreement with the AEC are without authority to license or regulate, from the standpoint of radiological health and safety, byproduct, source, and special nuclear material or production and utilization facilities. Even those States which have entered into a section 274 agreement with the AEC (Agreement States) lack authority to license or regulate, from the standpoint of radiological health and safety, the construction and operation of production and utilization facilities (including nuclear power plants) and other activities reserved to the AEC by section 274c. (To the extent that Agreement States have authority to regulate byproduct, source, and special nuclear material, their section 274 Agreements require them to use their best efforts to assure that their regulatory programs for protection against radiation hazards will continue to be compatible with the AEC's program for the regulation of byproduct, source and special nuclear material.)

(k) The following judicial precedents and legal authorities support the foregoing conclusions: Northern California Ass'n, Etc. v. Public Utilities Commission, 37 Cal. Rep. 432, 390 P. 2d 200 (1964); Boswell v. City of Long Beach, CCH Atomic Energy Law Reports, par. 4045 (1960); Opinion of the Attorney General of Michigan (Oct. 31, 1962); Opinion of the Attorney General of South Dakota (July 23, 1964); New York State Bar Association, Committee on Atomic Energy, State Jurisdiction to Regulate Atomic Activities (July 12, 1963). No precedents or authorities to the contrary have come to our attention.

[34 FR 7273, May 3, 1969]

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[17] 1959 U.S. Code Congressional and Administrative News, v. 2, p. 2879.

[18] Id. at pp. 2882-3.

[19] As noted above, regulation of construction and operation of production or utilization facilities was one of the areas reserved to the AEC. It is clear from the legislative history of section 274 that control of "operation" of such facilities includes the regulation of the radiological effects of the discharge of affluents from the facilities. (Hearings before the Joint Committee on Atomic Energy on Federal-State Relationships in the Atomic Energy Field, 86th Cong., first session, 1959, p. 306.) AEC regulations implementing section 274 recognize that intent by defining facility operation to include the discharge of radioactive effluents from the facility site (10 CFR 150.15).

§ 8.5 Interpretation by the General Counsel of § 73.55 of this chapter; illumination and physical search requirements.

(a) A request has been received to interpret 10 CFR 73.55(c)(5) and 73.55(d)(1).

10 CFR 73.55(c)(5) provides:

> Isolation zones and all exterior areas within the protected area shall be provided with illumination sufficient for the monitoring and observation requirements of paragraphs (c)(3), (c)(4), and (h)(4) of this section, but not less than 02. footcandle measured horizontally at ground level.

(b) The requester contends that the regulation is satisfied if 0.2 footcandle is provided only at the protected area boundary and the isolation zone. The language of the regulation is clearly to the contrary. It requires not less than 0.2 footcandle for "all exterior areas within the protected area." This regulation helps effectuate the monitoring and observation requirements of 10 CFR 73.55. For example, 10 CFR 73.55(c)(4) states that "All exterior areas within the protected area shall be periodically checked to detect the presence of unauthorized persons, vehicles, or materials." In the absence of illumination, such checking could not be fully effective.

(c) The requester also asks whether the illumination requirement extends to the tops and sides of buildings within the protected area. To effectuate the monitoring and observation requirements cited above, illumination must be maintained for the tops and sides of all accessible structures within the protected area. This interpretation is consistent with that given by the Commission's staff to affected licensees and applicants at a series of regional meetings held in March of 1977 and will be reflected in forthcoming revisions to NUREG 0220, Draft Interim Acceptance Criteria for a Physical Security Plan for Nuclear Power Plants (March 1977).

(d) 10 CFR 73.55(d)(1) provides in pertinent part: The search function for detection of firearms, explosives, and incendiary devices shall be conducted either by a physical search or by use of equipment capable of detecting such devices.

(e) The requester contends that until "equipment capable of detecting such devices" is in place, a licensee need not comply with the search requirement, but can utilize instead previous security programs. This contention is based on the first sentence of 10 CFR 73.55 which provides in pertinent part that the requirements of paragraph (d) of that section shall be met by May 25, 1977, "except for any requirement involving construction and installation of equipment not already in place expressed in (paragraph)(d)(1) * * *" Under this sentence only those requirements of paragraph (d) which involve "construction and installation of equipment" do not take effect on May 25, 1977. Because a "physical search" does not require "constuction and installation of equipment", implementation of such searches is required on May 25, 1977. The regulation provides alternative: "the search function * * * shall be conducted either by a physical search or by use of equipment * * *." Thus when appropriate equipment is in place, the search function need not involve a physical search.

(f) The paragraphs above set forth interpretation of regulations; they do not apply those regulations to particular factual settings. For example, no effort is made to state what lighting system might be used for a given facility; all that is stated is that a system must provide not less than 0.2 footcandle for all exterior areas within the protected area. Similarly, no effort is made to define what is an adequate "physical search"; all that is stated is that, in the absence of appropriate equipment, such searches must begin on May 25, 1977.

[42 FR 33265, June 30, 1977]

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AUTHORITY: Sec. 161, 68 Stat. 948, as amended (42 U.S.C. 2201); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841).

Subpart A also issued under 5 U.S.C. 552; 31 U.S.C. 9701; Pub. L. 99-570.

Subpart B is also issued under 5 U.S.C. 552a.

Subpart C also issued under 5 U.S.C. 552b.

§ 9.1 Scope and purpose.

(a) Subpart A implements the provisions of the Freedom of Information Act, 5 U.S.C. 552, concerning the availability to the public of Nuclear Regulatory Commission records for inspection and copying.

(b) Subpart B implements the provisions of the Privacy Act of 1974, 5

U.S.C. 552a, concerning disclosure and availability of certain Nuclear Regulatory Commission records maintained on individuals.

(c) Subpart C implements the provisions of the Government in the Sunshine Act, 5 U.S.C. 552b, concerning the opening of Commission meetings to public observation.

(d) Subpart D describes procedures governing the production of agency records, information, or testimony in response to subpoenas or demands of courts or other judicial or quasi-judicial authorities in State and Federal proceedings.

[52 FR 49355, Dec. 31, 1987]

§ 9.3 Definitions.

As used in this part:

"Commission" means the Commission of five members or a quorum thereof sitting as a body, as provided by section 201 of the Energy Reorganization Act of 1974.

"Government agency" means any executive department, military department, Government corporation, Government-controlled corporation, or other establishment in the executive branch of the Government (including the Executive Office of the President), or any independent regulatory agency.

"NRC" means the Nuclear Regulatory Commission, established by the Energy Reorganization Act of 1974.

"NRC personnel" means employees, consultants, and members of advisory boards, committees, and panels of the NRC; members of boards designated by the Commission to preside at adjudicatory proceedings; and officers or employees of Government agencies, including military personnel, assigned to duty at the NRC.

"Working days" mean Monday through Friday, except legal holidays.

[52 FR 49355, Dec. 31, 1987]

§ 9.5 Interpretations.

Except as specifically authorized by the Commission in writing, no interpretation of the meaning of the regulations in this part by an officer or employee of the Commission other than a written interpretation by the General Counsel will be recognized as binding upon the Commission.

[52 FR 49356, Dec. 31, 1987]

§ 9.8 Information collection requirements: OMB approval.

(a) The NRC has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*). OMB has approved the information collection requirements contained in this part under control number 3150-0043.

(b) The approved information collection requirements contained in this part appear in §§ 9.29, 9.41, 9.54, 9.55, and 9.202.

[52 FR 49356, Dec. 31, 1987]

Subpart A—Freedom of Information Act Regulations

Source: 52 FR 49356, Dec. 31, 1987, unless otherwise noted.

§ 9.11 Scope of subpart.

This subpart prescribes procedures for making NRC agency records available to the public for inspection and copying pursuant to the provisions of the Freedom of Information Act (5 U.S.C. 552) and provides notice of procedures for obtaining NRC records otherwise publicly available. This subpart does not affect the dissemination or distribution of NRC-originated, or NRC contractor-originated, information to the public under any other NRC public, technical, or other information program or policy.

§ 9.13 Definitions.

As used in this subpart:

"Agency record" is a record in the possession and control of the NRC that is associated with Government business. Agency record does not include records such as—

(1) Publicly available books, periodicals, or other publications that are owned or copyrighted by non-Federal sources;

(2) Records solely in the possession and control of NRC contractors;

(3) Personal records in possession of NRC personnel that have not been cir-

culated, were not required to be created or retained by the NRC, and can be retained or discarded at the author's sole discretion, or records of a personal nature that are not associated with any Government business; or

(4) Non-substantive information in logs or schedule books of the Chairman or Commissioners, uncirculated except for typing or recording purposes.

"Commerical-use request" means a request made under § 9.23(b) for a use or purpose that furthers the commercial, trade, or profit interests of the requester or the person on whose behalf the request is made.

"Direct costs" mean the expenditures that an agency incurs in searching for and duplicating agency records. For a commercial-use request, direct costs include the expenditures involved in reviewing records to respond to the request. Direct costs include the salary of the employee category performing the work based on that basic rate of pay plus 16 percent of that rate to cover fringe benefits and the cost of operating duplicating machinery.

"Duplication" means the process of making a copy of a record necessary to respond to a request made under § 9.23. Copies may take the form of paper copy, microform, audio-visual materials, disk, magnetic tape, or machine readable documentation, among others.

"Educational institution" means an institution which operates a program or programs of scholarly research. Educational institution refers to a preschool, a public or private elementary or secondary school, an institution of graduate higher education, an institution of undergraduate higher education, an institution of professional education, or an institution of vocational education.

"Noncommercial scientific institution" means an institution that is not operated on a commercial basis, as the term "commercial" is referred to in the definition of "commercial-use request," and is operated solely for the purpose of conducting scientific research, the results of which are not intended to promote any particular product or industry.

"Office", unless otherwise indicated, means all offices, boards, panels, and advisory committees of the NRC.

"Record" means any book, paper, map, photograph, brochure, punch card, magnetic tape, paper tape, sound recording, pamphlet, slide, motion picture, or other documentary materia regardless of form or characteristics. Record does not include an object o article such as a structure, furniture, tangible exhibit or model, a vehicle, o piece of equipment.

"Representative of the news media" means any person actively gatherin news for an entity that is organize and operated to publish or broadcas news to the public. The term "news" means information that is about current events or that would be of current interest to the public. Example of news media entities include television or radio stations broadcasting t the public at large, and publishers o periodicals (but only in those instances when they can qualify as disseminators of "news") who make thei products available for purchase or subscriptions by the general public.

"Review" means the process of examining records identified as responsive to a commercial-use request to determine whether they are exempte from disclosure in whole or in par Also, review includes examinin records to determine which Freedo of Information Act exemptions are applicable, identifying records or portions thereof to be disclosed, and excising from the records those portion which are to be withheld.

"Search" means all time spent looking for records, either by manua search or search using existing computer programs, that respond to a request including a page-by-page or line by-line identification of responsive information within the records.

"Unusual circumstances" mean—

(1) The need to search for and collect the requested records from fiel facilities or other establishments tha are separate from the office processin the request;

(2) The need to search for, collec and appropriately examine a volum nous amount of separate and distinc records which are demanded in single request; or

(3) The need for consultation, which will be conducted with all practicable speed, with another agency having a substantial interest in the determination of the request or among two or more components of the NRC having substantial subject-matter interest therein.

§ 9.15 Availability of records.

The NRC will make available for public inspection and copying any reasonably described agency record in the possession and control of the NRC under the provisions of this subpart, and upon request by any person. Records that the NRC routinely makes publicly available are described in § 9.21. Procedures and conditions governing requests for records are set forth in § 9.23.

§ 9.17 Agency records exempt from public disclosure.

(a) The following types of agency records are exempt from public disclosure under § 9.15:

(1) Records (i) which are specifically authorized under criteria established by an Executive order to be kept secret in the interest of national defense or foreign policy, and (ii) which are in fact properly classified pursuant to such Executive order;

(2) Records related solely to the internal personnel rules and practices of the agency;

(3) Records specifically exempted from disclosure by statute (other than 5 U.S.C. 552b), provided that such statute—

(i) Requires that the matters be withheld from the public in such a manner as to leave no discretion on the issue, or

(ii) Establishes particular criteria for withholding or refers to particular types of matters to be withheld;

(4) Trade secrets and commercial or financial information obtained from a person and privileged or confidential;

(5) Interagency or intraagency memorandums or letters which would not be available by law to a party other than an agency in litigation with the agency;

(6) Personnel and medical files and similar files, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy;

(7) Records or information compiled for law enforcement purposes, but only to the extent that the production of such law enforcement records or information—

(i) Could reasonably be expected to interfere with enforcement proceedings;

(ii) Would deprive a person of a right to a fair trial or an impartial adjudication;

(iii) Could reasonably by expected to constitute an unwarranted invasion of personal privacy;

(iv) Could reasonably be expected to disclose the identity of a confidential source, including a State, local, or foreign agency or authority, or any private institution which furnished information on a confidential basis, and, in the case of a record or information compiled by a criminal law enforcement authority in the course of a criminal investigation, or by an agency conducting a lawful national security intelligence investigation, information furnished by a confidential source;

(v) Would disclose techniques and procedures for law enforcement investigations or prosecutions, or would disclose guidelines for law enforcement investigations or prosecutions if such disclosure could reasonably be expected to risk circumvention of the law; or

(vi) Could reasonably be expected to endanger the life or physical safety of any individual;

(8) Matters contained in or related to examination, operating, or condition reports prepared by, on behalf of, or for the use of any agency responsible for the regulation or supervision of financial institutions; or

(9) Geological and geophysical information and data, including maps, concerning wells.

(b) Nothing in this subpart authorizes withholding of information or limiting the availability of records to the public except as specifically provided in this part, nor is this subpart authority to withhold information from Congress.

(c) Whenever a request is made which involves access to agency records described in paragraph (a)(7) of this section, the NRC may, during only such time as that circumstance continues, treat the records as not subject to the requirements of this subpart when—

(1) The investigation or proceeding involves a possible violation of criminal law; and

(2) There is reason to believe that—

(i) The subject of the investigation or proceeding is not aware of its pendency; and

(ii) Disclosure of the existence of the records could reasonably be expected to interfere with enforcement proceedings.

§ 9.19 Segregation of exempt information and deletion of identifying details.

(a) For records required to be made available under 5 U.S.C. 552(a)(2), the NRC shall delete the name with any identifying details, if the release of the name or other identifying details of, or relating to, a private party will constitute a clearly unwarranted invasion of personal privacy. The NRC shall provide notification that names of parties and certain other identifying details have been removed in order to prevent a clearly unwarranted invasion of the personal privacy of the individuals involved.

(b) In responding to a request for information submitted under § 9.23, in which it has been determined to withhold exempt information, the NRC shall segregate—

(1) Information that is exempt from public disclosure under § 9.17(a) from nonexempt information; and

(2) Factual information from advice, opinions, and recommendations in predecisional records unless the information is inextricably intertwined, or is contained in drafts, legal work products, and records covered by the lawyer-client privilege, or is otherwise exempt from disclosure.

§ 9.21 Publicly available records.

(a) Publicly available records of NRC activities described in paragraphs (c) and (d) of this section are available through the National Technical Information Service. Subscriptions to these records are available on 48x microfiche and may be ordered from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. Single copies of NRC publications in the NUREG series, NRC Regulatory Guides, and Standard Review Plans are also available from the National Technical Information Service.

(b) For the convenience of persons who may wish to inspect without charge or purchase copies of a record or a limited category of records for a fee, publicly available records of the NRC's activities described in paragraph (c) of this section are also made available at the NRC Public Document Room. The NRC Public Document Room is located at 2120 L Street, NW., Washington, DC, and is open between 7:45 a.m. and 4:15 p.m. on Monday through Friday, except legal holidays.

(c) The following records of NRC activities are publicly available at the NRC Public Document Room for public inspection and copying:

(1) Final opinions including concurring and dissenting opinions as well as orders of the NRC issued as a result of adjudication of cases;

(2) Statements of policy and interpretations which have been adopted by the NRC and have not been published in the FEDERAL REGISTER;

(3) Nuclear Regulatory Commission rules and regulations;

(4) Nuclear Regulatory Commission Manual and instructions to NRC personnel that affect any member of the public;

(5) Records made available for public inspection and copying under this chapter and the NRC Manual. (NRC Bulletin 3203-15 describes the "NRC Policy for Routinely Making NRC Records Publicly Available");

(6) Current indexes to records made available under 5 U.S.C. 552(a)(2) and that are made publicly available are listed in NUREG-0550, "Title of List of Documents Made Publicly Available," which is published monthly.

(d) Records made publicly available under paragraphs (c)(1), (2), and (5) of this section are also available for purchase through the National Technical Information Service.

[52 FR 49356, Dec. 31, 1987, as amended at 53 FR 43420, Oct. 27, 1988]

§ 9.23 Requests for records.

(a)(1) A person may request access to records routinely made available by the NRC under § 9.21 in person or in writing at the NRC Public Document Room, 2120 L Street, NW., Washington, DC 20555.

(i) Each record requested must be described in sufficient detail to enable the Public Document Room to locate the record. If the description of the record is not sufficient to allow the Public Document Room staff to identify the record, the Public Document Room shall advise the requester to select the record from the indexes published under § 9.21(c)(6).

(ii) In order to obtain copies of records expeditiously, a person may open an account at the Public Document Room with the private contracting firm that is responsible for duplicating NRC records.

(2) A person may also order records routinely made available by the NRC under § 9.21 from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia, 22161.

(b) A person may request agency records by submitting a request authorized by 5 U.S.C. 552(a)(3) to the Director, Division of Freedom of Information and Publications Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555. The request must be in writing and clearly state on the envelope and in the letter that it is a "Freedom of Information Act request." The NRC does not consider a request as received until it has been received and logged in by the Director, Division of Freedom of Information and Publications Services, Office of Administration.

(1) A Freedom of Information request covers only agency records that are in existence on the date the Director, Division of Freedom of Information and Publications Services, receives the request. A request does not cover agency records destroyed or discarded before receipt of a request or which are created after the date of the request.

(2) All Freedom of Information Act requests for copies of agency records must reasonably describe the agency records sought in sufficient detail to permit the NRC to identify the requested agency records. Where possible, the requester should provide specific information regarding dates, titles, docket numbers, file designations, and other information which may help identify the agency records. If a requested agency record is not described in sufficient detail to permit its identification, the Director, Division of Freedom of Information and Publications Services, shall inform the requester of the deficiency within 10 working days after receipt of the request and ask the requester to submit additional information regarding the request or meet with appropriate NRC personnel in order to clarify the request.

(3) Upon receipt of a request made under paragraph (b) of this section, the NRC shall provide written notification to the requester that indicates the request has been received, the name of the individual and telephone number to contact to find out the status of the request, and other pertinent matters regarding the processing of the request.

(4) (i) The NRC shall advise a requester that fees will be assessed if—

(A) A request involves anticipated costs in excess of the minimum specified in § 9.39; and

(B) Search and duplication is not provided without charge under § 9.39; or

(C) The requester does not specifically state that the cost involved is acceptable or acceptable up to a specified limit.

(ii) The NRC has discretion to discontinue processing for records responsive to a request made under this paragraph (b) until—

(A) A required advance payment has been received;

(B) The requester has agreed to bear the estimated costs;

(C) A determination has been made on a request for waiver or reduction of fees; or

(D) The requester meets the requirements of § 9.39.

(c) If a requested agency record that has been reasonably described is located at a place other than the NRC Public Document Room or NRC headquarters, the NRC may, at its discretion, make the record available for inspection and copying at the other location.

(d) Except as provided in § 9.39—

(1) If the record requested under paragraph (b) of this section is a record available through the National Technical Information Service, the NRC shall refer the requester to the National Technical Information Service; and

(2) If the requested record has been placed in the NRC Public Document Room under § 9.21, the NRC may inform the requester that the record is in the PDR, and that the record may be obtained in accordance with the procedures set forth in paragraph (a) of this section.

(e) The Director, Division of Freedom of Information and Publications Services, shall promptly forward a Freedom of Information Act request made under § 9.23(b) for an agency record which is not publicly available in the NRC Public Document Room under § 9.21 to the head of the office primarily concerned with the records requested and to the General Counsel, as appropriate. The responsible office will conduct a search for the agency records responsive to the request and compile those agency records to be reviewed for initial disclosure determination under §§ 9.25 and 9.27.

[52 FR 49356, Dec. 31, 1987, as amended at 53 FR 43420, Oct. 27, 1988; 53 FR 52993, Dec. 30, 1988; 54 FR 53316, Dec. 28, 1989]

§ 9.25 Initial disclosure determination.

(a) The head of the responsible office shall review agency records located in a search under § 9.23(b) to determine whether the agency records are exempt from disclosure under § 9.17(a). If the head of the office determines that, although exempt, the disclosure of the agency records will not be contrary to the public interest and will not affect the rights of any person, the head of the office may authorize disclosure of the agency records. If the head of the office authorizes disclosure of the agency records, the head of the office shall furnish the agency records to the Director, Division of Freedom of Information and Publications Services, who shall notify the requester of the determination in the manner provided in § 9.27.

(b) Except as provided in paragraph (c) of this section, if, as a result of the review specified in paragraph (a) of this section, the head of the responsible office finds that agency records should be denied in whole or in part, the head of the office will submit that finding to the Director, Division of Freedom of Information and Publications Services, who will, in consultation with the Office of the General Counsel, make an independent determination whether the agency records should be denied in whole or in part. If the Director, Division of Freedom of Information and Publications Services, determines that the agency records sought are exempt from disclosure and disclosure of the records is contrary to the public interest and will adversely affect the rights of any person, the Director, Division of Freedom of Information and Publications Services, shall notify the requester of the determination in the manner provided in § 9.27.

(c) For agency records located in the office of a Commissioner or in the Office of the Secretary of the Commission, the Assistant Secretary of the Commission shall make the initial determination to deny agency records in whole or in part under § 9.17(a) instead of the Director, Division of Freedom of Information and Publications Services. For agency records located in the Office of the General Counsel, the General Counsel shall make the initial determination to deny agency records in whole or in part instead of the Director, Division of Freedom of Information and Publications Services. For agency records located in the Office of the Inspector General, the Assistant Inspector General for Audits or the Assistant Inspector General for Investigations shall make the initial determination to deny agency records in whole or in part instead of the Director, Division of Freedom of Information and Publications Services. If the Assistant Secretary of the Commission, the General Counsel, the Assistant Inspector General for Audits, or the Assistant Inspector General for Investigations determines that the agency records sought are exempt from disclosure and that their disclosure is contrary to the public interest and will adversely affect the rights of any person, the Assistant Secretary of the Commission, the General Counsel, the Assistant Inspector General for Audits, or the Assistant Inspector General for Investigations shall furnish that determination to the Director, Division of Freedom of Information and Publications Services, who shall notify the requester of the determination in the manner provided in § 9.27

(d) If a requested record that is located is one of another Government agency or deals with subject matter over which an agency other than the NRC has exclusive or primary responsibility, the NRC shall promptly refer the record to that Government agency for disposition or for guidance regarding disposition.

(e) The 10-working day period for response to a request for agency records provided in paragraphs (a), (b), and (c) of this section may be extended for unusual circumstances as provided in § 9.31.

(f) In exceptional circumstances where it does not appear possible to complete action on a request within the maximum 20 working-day limit as provided in § 9.31, the Director, Division of Freedom of Information and Publications Services, may seek an agreement with the requester for a specified extension of time in which to act upon the request. The NRC shall confirm the agreement for an extension of time in writing.

(g) If the NRC does not respond to a request within the 10-working-day period, or within the extended periods described in paragraph (e) of this section, the requester may treat that delay as a denial of the request and immediately appeal to the Executive Director for Operations as provided in § 9.29(a) or sue in a district court as noted in § 9.29(c).

[52 FR 49356, Dec. 31, 1987, as amended at 53 FR 52993, Dec. 30, 1988; 55 FR 33646, Aug. 17, 1990]

§ 9.27 Form and content of responses.

(a) When the NRC has located a requested agency record and has determined to disclose the agency record, the Director, Division of Freedom of Information and Publications Services, shall promptly furnish the agency record or notify the requester where and when the agency record will be available for inspection and copying. The NRC will normally place copies of agency records disclosed in response to Freedom of Information Act requests in the NRC Public Document Room and, for agency records relating to a specific nuclear power facility, in the Local Public Document Room established for that facility. The NRC shall also advise the requester of any applicable fees under § 9.35.

(b) When the NRC denies access to a requested agency record or denies a request for a waiver or reduction of fees, the Director, Division of Freedom of Information and Publications Services, shall notify the requester in writing. The denial includes as appropriate—

(1) The reason for the denial;

(2) A reference to the specific exemption under the Freedom of Information Act and the Commission's regulations authorizing the withholding of the agency record or portions of it;

(3) The name and title or position of each person responsible for the denial of the request, including the head of the office recommending denial of a record;

(4) A statement stating why the request does not meet the requirements of § 9.41 if the request is for a waiver or reduction of fees; and

(5) A statement that the denial may be appealed within 30 days from the receipt of the denial to the Executive Director for Operations, to the Secretary of the Commission, or to the Inspector General, as appropriate.

(c) The Director, Division of Freedom of Information and Publications Services, shall maintain a copy of each letter granting or denying requested agency records or denying a request for waiver or reduction of fees in accordance with the NRC Comprehensive Records Disposition Schedule.

[52 FR 49356, Dec. 31, 1987, as amended at 53 FR 52993, Dec. 30, 1988; 55 FR 33646, Aug. 17, 1990]

§ 9.29 Appeal from initial determination.

(a) A requester may appeal a notice of denial of a Freedom of Information Act request for agency records or a request for waiver or reduction of fees under this subpart within 30 days of the date of the NRC's denial. For agency records denied by an Office Director reporting to the Executive Director for Operations or for a denial of a request for a waiver or reduction of fees, the appeal must be in writing and addressed to the Executive Director for Operations, U.S. Nuclear Regulatory Commission, Washington, DC 20555. For agency records denied by an Office Director reporting to the Commission, the Assistant Secretary of the Commission, or the Advisory Committee Management Officer, the appeal must be in writing and addressed to the Secretary of the Commission. For agency records denied by the Assistant Inspector General for Audits or the Assistant Inspector General for Investigations, the appeal must be in writing and addressed to the Inspector General. The appeal should clearly state on the envelope and in the letter that it is an "Appeal from Initial FOIA Decision." The NRC does not consider an appeal that is not marked as indicated in this paragraph as received until it is actually received by the Executive Director for Operations, Secretary of the Commission, or the Inspector General.

(b) The NRC shall make determination on any appeal made under this section within 20 working days after the receipt of the appeal.

(c)(1) If the appeal of the denial of the request for agency records is upheld in whole or in part, the Executive Director for Operations, or a Deputy Director, or the Secretary of the Commission, or the Inspector General shall notify the requester of the denial specifying—

(i) The exemptions relied upon;

(ii) An explanation of how the exemption applies to the agency records withheld; and

(iii) The reasons for asserting the exemption.

(2) If, on appeal, the denial of a request for waiver or reduction of fees for locating and reproducing agency records is upheld in whole or in part, the Executive Director for Operations or a Deputy Executive Director shall notify the person making the request of his decision to sustain the denial, including a statement explaining why the request does not meet the requirements of § 9.41.

(3) The Executive Director for Operations, or a Deputy Executive Director, or the Secretary of the Commission, or the Inspector General shall inform the requester that the denial is a final agency action and that judicial review is available in a district court of the United States in the district in which the requester resides or has a principal place of business, in which the agency records are situated, or in the District of Columbia.

(d) The Executive Director for Operations, or a Deputy Executive Director, or the Secretary of the Commission, or the Inspector General shall furnish copies of all appeals and written determinations on appeals to the Director, Division of Freedom of Information and Publications Services.

[52 FR 49356, Dec. 31, 1987, as amended at 53 FR 52993, Dec. 30, 1988; 54 FR 10138, Mar. 10, 1989; 55 FR 33646, Aug. 17, 1990]

§ 9.31 Extension of time for response.

(a) In unusual circumstances defined in § 9.13, the NRC may extend the time limits prescribed in § 9.25 or § 9.29 by not more than 10 working days. The extension may be made by written notice to the person making the request to explain the reasons for the extension and indicate the date on which a determination is expected to be dispatched.

(b) An extension of the time limits prescribed in §§ 9.25 and 9.29 may not exceed a combined total of 10 working days per request.

§ 9.33 Search, review, and special service fees.

(a) The NRC charges fees for—

(1) Search, duplication, and review, when agency records are requested for commercial use;

(2) Duplication of agency records provided in excess of 100 pages when agency records are not sought for commercial use and the request is made by an educational or noncommercial sci-

entific institution, or a representative of the news media;

(3) Search and duplication of agency records in excess of 100 pages for any request not described in paragraphs (a)(1) and (2) of this section;

(4) The direct costs of searching for agency records. The NRC will assess fees even when no agency records are located as a result of the search or when agency records that are located as a result of the search are not disclosed; and

(5) Computer searches which include the cost of operating the Central Processing Unit for that portion of operating time that is directly attributable to searching for agency records plus the operator/programmer salary apportionable to the search.

(b) The NRC may charge requesters who request the following services for the direct costs of the service:

(1) Certifying that records are true copies; or

(2) Sending records by special methods, such as express mail, package delivery service, etc.

§ 9.34 Assessment of interest and debt collection.

(a) The NRC shall assess interest on the fee amount billed starting on the 31st day following the day on which the billing was sent in accordance with NRC's regulations set out in § 15.37 of this chapter. Interest is at the rate prescribed in 21 U.S.C. 3717.

(b) The NRC will use its debt collection procedures under Part 15 of this chapter for any overdue fees.

§ 9.35 Duplication fees.

(a)(1) Charges for the duplication of records made available under § 9.21 at the NRC Public Document Room (PDR), 2120 L Street, Lower Level, NW., Washington, DC by the duplicating service contractor are as follows:

(i) 5.8 cents per page for paper copy to paper copy, except for engineering drawings and any other records larger than 17 x 11 inches for which the charges vary as follows depending on the reproduction process that is used:

(A) Xerographic process—$1.50 per square foot for large documents or engineering drawings (random size up to 24 inches in width and with variable length) reduced or full size;

(B) Photographic process—$6.75 per square foot for large documents or engineering drawings (random size exceeding 24 inches in width up to a maximum size of 42 inches in length) full size only.

(ii) 5.8 cents per page for microform to paper copy, except for engineering drawings and any other records larger than 17 x 11 inches for which the charge is $1.35 per square foot or $2.95 for a reduced size print which the charge is $1.35 per square foot or $2.95 for a reduced size print (18 x 24 inches).

(iii) 85 cents per microfiche to microfiche.

(iv) 85 cents per aperture card to aperture card.

(2) Self-service, coin-operated, duplicating machines are available at the PDR for the use of the public. Paper to paper is $0.10 per page. Microform to paper is $0.10 per page on the reader printers.

(3) A requester may submit mail-order requests for contractor duplication of NRC records made by writing to the NRC Public Document Room. The charges for mail-order duplication of records are the same as those set out in paragraph (a)(1) of this section, plus mailing or shipping charges.

(4) A requester may open an account with the duplicating service contractor. A requester may obtain the name and address and billing policy of the contractor from the NRC Public Document Room.

(5) Any change in the costs specified in this section will become effective immediately pending completion of the Commission's rulemaking that amends this section to reflect the new charges. The Commission shall post the charges that will be in effect for the interim period in the Public Document Room. The Commission shall complete the rulemaking necessary to reflect the new charges within 15 working days from the beginning of the interim period.

(b) The NRC shall assess the following charges for copies of records to be duplicated by the NRC at locations other than the NRC Public Document

Room located in Washington, DC or at local Public Ducument Rooms:

(1) Sizes up to 8½ x 14 inches made on office copying machines—$0.20 per page of copy; and

(2) The charge for duplicating records other than those specified in paragraphs (a) and (b) is computed on the basis of NRC's direct costs.

(c) In compliance with the Federal Advisory Committee Act, a requester may purchase copies of transcripts of testimony in NRC Advisory Committee proceedings, which are transcribed by a reporting firm under contract with the NRC directly from the reporting firm at the cost of reproduction as provided for in the contract with the reporting firm. A requester may also purchase transcripts from the NRC at the cost of reproduction as set out in paragraphs (a) and (b) of this section.

(d) Copyrighted material may not be reproduced in violation of the copyright laws.

(e) Charges for the duplication of NRC records located in NRC Local Public Document Rooms are those costs that the institutions maintaining the NRC Local Public Document Room collections establish.

[52 FR 49356, Dec. 31, 1987, as amended at 53 FR 43420, Oct. 27, 1988; 54 FR 36757, Sept. 5, 1989]

§ 9.37 Fees for search and review of agency records by NRC personnel.

The NRC shall charge the following hourly rates for search and review of agency records by NRC personnel:

(a) Clerical search, review, and duplication at a salary rate that is equivalent to a GG-7, Step 5 plus 16 percent fringe benefits;

(b) Professional/managerial search, review, and duplication at a salary rate that is equivalent to a GG-13, Step 5 plus 16 percent fringe benefits; and

(c) Senior executive or Commissioner search, review, and duplication at a salary rate that is equivalent to an ES-3 plus 16 percent fringe benefits.

§ 9.39 Search and duplication provided without charge.

(a) The NRC shall search for agency records requested under § 9.23(b), without charges when agency records are not sought for commercial use and the records are requested by an educational or noncommercial scientific institution, or a representative of the news media.

(b) The NRC shall search for agency records requested under § 9.23(b) without charges for the first two hours of search for any request not sought for commercial use and not covered in paragraph (a) of this section.

(c) The NRC shall duplicate agency records requested under § 9.23(b) without charge for the first 100 pages of standard paper copies, or equivalent pages in microfiche, computer, disks, etc., if the requester is not a commercial-use requester.

(d) The NRC may not bill any requester for fees if the cost of collecting the fee would be equal to or greater than the fee itself.

(e) The NRC may aggregate requests in determining search and duplication to be provided without charge as provided in paragraphs (a) and (b) of this section, if the NRC finds a requester has filed multiple requests for only portions of an agency record or similar agency records for the purpose of avoiding charges.

§ 9.40 Assessment of fees.

(a) If the request is expected to require the NRC to assess fees in excess of $25 for search and/or duplication, the NRC shall notify the requester that fees will be assessed unless the requester has indicated in advance his or her willingness to pay fees as high as estimated.

(b) In the notification, the NRC shall include the estimated cost of search fees and the nature of the search required and estimated cost of duplicating fees.

(c) The NRC will encourage requesters to discuss with the NRC the possibility of narrowing the scope of the request with the goal of reducing the cost while retaining the requester's original objective.

(d) If the fee is determined to be in excess of $250, the NRC shall require an advance payment.

(e) Unless a requester has agreed to pay the estimated fees or, as provided for in paragraph (d) of this section, the requester has paid an estimated fee in excess of $250, the NRC may not begin to process the request.

(f) If the NRC receives a new request and determines that the requester has failed to pay a fee charged within 30 days of receipt of the bill on a previous request, the NRC may not accept the new request for processing until payment of the full amount owed on the prior request, plus any applicable interest assessed as provided in § 9.34, is made.

(g) Within 10 working days of the receipt of NRC's notice that fees will be assessed, the requester shall provide advance payment if required, notify the NRC in writing that the requester agrees to bear the estimated costs, or submit a request for a waiver or reduction of fees pursuant to § 9.41.

§ 9.41 Requests for waiver or reduction of fees.

(a)(1) The NRC shall collect fees for searching for, reviewing, and duplicating agency records, except as provided in § 9.39, unless a requester submits a request in writing for a waiver or reduction of fees. To assure that there will be no delay in the processing of Freedom of Information Act requests, the request for a waiver or reduction of fees should be included in the initial Freedom of Information Act request letter.

(2) Each request for a waiver or reduction of fees must be addressed to the Director, Division of Freedom of Information and Publications Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

(b) A person requesting the NRC to waive or reduce search, review, or duplication fees shall:

(1) Describe the purpose for which the requester intends to use the requested information;

(2) Explain the extent to which the requester will extract and analyze the substantive content of the agency record;

(3) Describe the nature of the specific activity or research in which the agency records will be used and the specific qualifications the requester possesses to utilize information for the intended use in such a way that it will contribute to public understanding;

(4) Describe the likely impact on the public's understanding of the subject as compared to the level of understanding of the subject existing prior to disclosure;

(5) Describe the size and nature of the public to whose understanding a contribution will be made;

(6) Describe the intended means of dissemination to the general public;

(7) Indicate if public access to information will be provided free of charge or provided for an access fee or publication fee; and

(8) Describe any commercial or private interest the requester or any other party has in the agency records sought.

(c) The NRC will waive or reduce fees, without further specific information from the requester if, from information provided with the request for agency records made under § 9.23(b), it can determine that disclosure of the information in the agency records is in the public interest because it is likely to contribute significantly to public understanding of the operations or activities of the Government and is not primarily in the commercial interest of the requester.

(d) In making a determination regarding a request for a waiver or reduction of fees, the NRC shall consider the following factors:

(1) How the subject of the requested agency records concerns the operations or activities of the Government;

(2) How the disclosure of the information is likely to contribute to an understanding of Government operations or activities;

(3) If disclosure of the requested information is likely to contribute to public understanding;

(4) If disclosure is likely to contribute significantly to public understanding of Government operations or activities;

(5) If, and the extent to which, the requester has a commercial interest that would be furthered by the disclosure of the requested agency records; and

(6) If the magnitude of the identified commercial interest of the requester is sufficiently large, in com-

parison with the public interest in disclosure, that disclosure is primarily in the commercial interest of the requester.

(e) If the written request for a waiver or reduction of fees does not meet the requirements of this section, the NRC will inform the requester that the request for waiver or reduction of fees is being denied and set forth the appeal rights under § 9.29 to the requester.

[52 FR 49356, Dec. 31, 1987, as amended at 53 FR 52993, Dec. 30, 1988; 54 FR 53316, Dec. 28, 1989]

§ 9.43 Processing of requests for a waiver or reduction of fees.

(a) Within 10 working days after receipt of a request for access to agency records for which the NRC agrees to waive fees under § 9.39(a) through (d) or § 9.41(c), the NRC shall respond to the request as provided in § 9.25.

(b) In making a request for a waiver or reduction of fees, a requester shall provide the information required by § 9.41(b).

(c) After receipt of a request for the waiver or reduction of fees made in accordance with § 9.41, the NRC shall either waive or reduce the fees and notify the requester of the NRC's intent to promptly provide the agency records or deny the request and provide a statement to the requester explaining why the request does not meet the requirements of § 9.41(b).

(d) As provided in § 9.29, a requester may appeal a denial of a request to waive or reduce fees within 30 days to the Executive Director for Operations.

§ 9.45 Annual report to Congress.

(a) On or before March 1 of each calendar year, the Chairman of the NRC will submit a report covering the preceding calendar year to the Speaker of the House of Representatives and President of the Senate for referral to the appropriate committees of the Congress. The report includes—

(1) The number of determinations made by the NRC to deny requests for records made to the NRC under this part and the reasons for each determination;

(2) The number of appeals made by persons under § 9.29, the results of the appeals, and the reason for the action taken on each appeal that results in a denial of information;

(3) The names and titles or positions of each person responsible for the denial of records requested under this section, and the number of instances of participation for each;

(4) The results of each proceeding conducted pursuant to 5 U.S.C. 552(a)(4)(F), including a report of the disciplinary action taken against the officer or employee who was primarily responsible for improperly withholding records, or an explanation of why disciplinary action was not taken;

(5) A copy of every rule the NRC published affecting this part;

(6) A copy of the fee schedule and the total amount of fees collected by the NRC for making records available under this part; and

(7) Any other information that indicates efforts to administer fully the provisions of 5 U.S.C. 552.

(b) The NRC shall make a copy of each report submitted to the Congress under paragraph (a) of this section available for public inspection and copying in the NRC Public Document Room.

Subpart B—Privacy Act Regulations

SOURCE: 40 FR 44484, Sept. 26, 1975, unless otherwise noted.

§ 9.50 Scope of subpart.

This subpart implements the provisions of section 3 of the Privacy Act of 1974, Pub. L. 93-579, 5 U.S.C. 552a, with respect to (a) the procedures by which individuals may determine the existence of, seek access to and request correction of NRC records concerning themselves, and (b) the requirements applicable to NRC personnel with respect to the use and dissemination of such records. The regulations in this subpart apply to all records which are retrievable from a system of records under the control of the Nuclear Regulatory Commission by the use of an individual's name or of an identifying number, symbol, or other identifying particular assigned to such individual. Except where specifically provided otherwise, this subpart applies to all NRC records maintained on individuals whether they predate or postdate September 27, 1975.

§ 9.51 Definitions.

As used in this subpart:

(a) "Individual" means a citizen of the United States or an alien lawfully admitted for permanent residence.

(b) The term "maintain" includes maintain, collect, use or disseminate.

(c) "Record" means any item, collection or grouping of information about an individual that is maintained by the NRC, including, but not limited to, his education, financial transactions, medical history, employment history or criminal history, and that contains the individual's name, or the identifying number, symbol or other identifying particular assigned to the individual, such as a finger or voice print or a photograph.

(d) "System manager" means the NRC official responsible for maintaining a system of records.

(e) "Systems of records" means a group of records under the control of the NRC from which information is retrieved by the name of an individual or by an identifying number, symbol, or other identifying particular assigned to an individual.

(f) "Statistical record" means a record in a system of records maintained for statistical research or reporting purposes only and not used in whole or in part in making any determination about an identifiable individual, except as provided by the Census Act, 13 U.S.C. 8.

(g) "Routine use" means, with respect to the disclosure of a record, the use of such record for a purpose which is compatible with the purpose for which it was collected, as described in a notice published in the Federal Register.

Procedures Applicable to Requests by Individuals for Information, Access or Amendment of Records Maintained About Them

PRESENTATION OF REQUESTS

§ 9.52 Types of requests.

(a) Individuals may make the following requests respecting records about themselves maintained by NRC in a system of records subject to the provisions of the Privacy Act of 1974:

(1) Request a determination whether a record about the individual is contained in a system of records.

(2) Request access to a record about the individual. Access requests may include requests to review the record and to have a copy made of all or any portion thereof in a form comprehensible to the individual.

(3) Request correction or amendment of a record about the individual.

(b) *Requests for accounting of disclosures.* Individuals may, at any time, request an accounting by NRC of disclosures to any other person or Government agency of any record about themselves contained in a system of records controlled by NRC, except the following: (1) Disclosures made pursuant to the Freedom of Information Act, 5 U.S.C. 552; (2) disclosures made within the Nuclear Regulatory Commission; (3) disclosures made to another Government agency or instrumentality for an authorized law enforcement activity pursuant to 5 U.S.C. 552a(b)(7); (4) disclosures expressly exempted by NRC regulations from the requirements of 5 U.S.C. 552a(c)(3) pursuant to 5 U.S.C. 552a(k).

§ 9.53 Requests; how and where presented.

(a) Requests may be made in person or in writing. Assistance regarding requests or other matters relating to the Privacy Act of 1974 may be obtained by writing to the Director, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Requests relating to records in multiple systems of records should be made to the Director, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. The Director, or his designee, shall assist the requestor in identifying his request more precisely and shall be responsible for forwarding the request to the appropriate system manager.

(b) All written requests shall be made to the Director, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and should clearly state on the envelope and in the letter, as appropriate: "Privacy Act Request," "Privacy Act Disclosure Accounting Request," "Privacy Act Correction Request." A request that is not so marked will be deemed not to have been received by the NRC until it is actually received by the Director, Office of Administration.

(c) Requests may be made in person during official hours at the U.S. Nuclear Regulatory Commission office where the record is located, as listed in the "Notice of System of Records" for the system in which the record is contained.

[40 FR 44484, Sept. 26, 1975, as amended at 41 FR 20645, May 20, 1976; 52 FR 31609, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

§ 9.54 Verification of identity of individuals making requests.

(a) Identification requirements in paragraphs (a) (1) and (2) of this section are applicable to any individual who makes requests respecting records about himself, except that no verification of identity shall be required if the records requested are available to the public under the provisions of the Freedom of Information Act. With respect to certain sensitive records, additional requirements for verification of identity stated in the appropriate published "Notice of System of Records" may be imposed.

(1) *Written requests.* An individual making a written request respecting a record about himself may establish his identity by a signature, address, date of birth, employee identification number if any, and one other item of identification such as a photocopy of a driver's license or other document.

(2) *Requests in person.* An individual making a request in person respecting a record about himself may establish his identity by the presentation of a single document bearing a photograph (such as a passport or identification badge) or by the presentation of two items of identification which do not bear a photograph but do bear a name, address and signature (such, as a driver's license or credit card).

(b) *Inability to provide requisite documentation of identity.* An individual making a request in person or in writing respecting a record about himself who cannot provide the necessary documentation of identity may provide a notarized statement, swearing or affirming to his identity and to the fact that he understands that penalties for false statements may be imposed pursuant to 18 U.S.C. 1001, and that penalties for obtaining a record concerning an individual under false pretenses may be imposed pursuant to 5 U.S.C. 552a(i)(3). Forms for such notarized statements may be obtained on request from the Director, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

(c) *Verification of parentage or guardianship.* In addition to establishing the identity of the minor, or other individual he represents as required in paragraph (a) of this section, the parent or legal guardian of a minor or of an individual judicially determined to be incompetent shall establish his status as parent or guardian by furnishing a copy of a birth certificate of the minor showing parentage or a copy of a court order establishing guardianship.

[40 FR 44484, Sept. 26, 1975, as amended at 52 FR 31609, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

§ 9.55 Specification of records.

(a)(1) Requests relating to records shall, insofar as practicable, specify the nature of the record sought, the approximate dates covered by the record, the system of records in which the record is thought to be included and the system manager having custody of the record system as shown in the annual compilation, "Notices of Records Systems", published by the General Services Administration. Requests shall, in addition, comply with any additional specification requirements contained in the published "Notice of System of Records" for that system.

(2) Requests for correction or amendment of records shall, in addition, specify the particular record involved, state the nature of the correction or amendment sought and furnish justification for the correction or amendment.

(b) Requests which do not contain information sufficient to identify the record requested will be returned promptly to the requestor, with a notice indicating what information is lacking. Individuals making requests in person will be informed of any deficiency in the specification of records at the time the request is made. Individuals making requests in writing will be notified of any such deficiency when their request is acknowledged.

§ 9.56 Accompanying persons.

An individual requesting access to records about himself may be accompanied by another individual of his own choosing. Both the individual requesting access and the individual accompanying him shall sign the required form indicating that the Nuclear Regulatory Commission is authorized to discuss the contents of the subject record in the presence of both individuals.

NRC PROCEDURES FOR PROCESSING REQUESTS

§ 9.60 Acknowledgement of requests.

(a) Written requests by individuals to verify the existence of, obtain access to or correct or amend records about themselves maintained by NRC in a system of records subject to the provisions of the Privacy Act of 1974, shall be acknowledged in writing by the Director, Office of Administration, or his designee, within ten working days after date of actual receipt. The acknowledgement shall advise the requestor if any additional information is needed to process the request. Wherever practicable, the acknowledgement shall notify the individual whether his request to obtain access to the record or to correct or amend the record has been granted or denied.

(b) When an individual requests access to records or permission to correct or amend records in person, every effort will be made to make an immediate determination as to whether access or correction or amendment should be granted. If an immediate determination cannot be made, the request will be processed in the same manner as a written request. Records will be made available for immediate inspection whenever possible.

[40 FR 44484, Sept. 26, 1975, as amended at 53 FR 17689, May 18, 1988; 54 FR 53316, Dec. 28, 1989]

§ 9.61 Procedures for processing requests for records exempt in whole or in part.

(a) When an individual requests information concerning the existence of, or access to, records about himself which have been compiled in reasonable anticipation of a civil action or proceeding in either a court or before an administrative tribunal, the NRC shall advise the individual only that no record available to him pursuant to the Privacy Act of 1974 has been identified.

(b) *Specific exemptions pursuant to 5 U.S.C. 552a(k).* Individual requests for access to records which have been exempted from access pursuant to the provisions of 5 U.S.C. 552a(k) and § 9.95d shall be processed as follows:

(1) *Information classified pursuant to Executive Order 12356 and exempted pursuant to 5 U.S.C. 552a(k)(1).* (i) Requested information classified by NRC will be reviewed by the responsible official of the NRC to determine whether it continues to warrant classification under the criteria of section 1.3 of Executive Order 12356.

(ii) Information which no longer warrants classification under these criteria shall be declassified and made available to the individual. If the requested information has been classified by another agency, the responsible official of the NRC will request the classifying agency to review the information to ascertain if classification is still warranted. If the information continues to warrant classification, the individual shall be advised that the information sought is classified, that it has been reviewed and continues to warrant classification, and that it has been exempted from access pursuant to 5 U.S.C. 552a(k)(1).

(2) *Investigatory material compiled for law enforcement purposes exempted pursuant to 5 U.S.C. 552a(k)(2).* Requests shall be responded to in the manner provided in paragraph (a) of this section unless a review of the information indicates that the informa-

tion has been used or is being used to deny the individual any right, privilege or benefit for which he is eligible or to which he would otherwise be entitled under Federal law. In that event, the individual shall be advised of the existence of the information and shall be provided the information except to the extent it would reveal the identity of a confidential source. Information that would reveal the identity of a confidential source shall be extracted or summarized in a manner which protects the source and the summary or extract shall be provided to the requesting individual.

(3) *Material within a system of records required by statute to be maintained and used solely as statistical records and exempted pursuant to 5 U.S.C. 552a(k)(4).* The exempted information requested will be reviewed by the responsible official of the NRC to determine whether it continues to warrant exemption. Information which no longer warrants exemption shall be made available to the individual. If the information continues to warrant exemption, the individual shall be advised that the information sought is exempt from disclosure, that it has been reviewed and continues to warrant exemption, and that it has been exempted from access pursuant to 5 U.S.C. 552a(k)(4).

(4) *Investigatory material compiled solely for the purpose of determining suitability, eligibility, or qualifications for Federal civilian employment, Federal contracts, or access to classified information and exempted pursuant to 5 U.S.C. 552a(k)(5).* Information exempted pursuant to 5 U.S.C. 552a(k)(5) shall be made available to an individual upon request except to the extent that the information would reveal the identity of a confidential source. Material that would reveal the identity of a confidential source shall be extracted or summarized in a manner which protects the source and the summary or extract shall be provided to the requesting individual.

(5) *Testing or examination material exempted pursuant to 5 U.S.C. 552a(k)(6).* Testing or examination material used solely to determine individual qualifications for appointment or promotion in the Federal service which has been exempted pursuant to 5 U.S.C. 552a(k)(6) shall not be made available to an individual if disclosure would compromise the objectivity or fairness of the testing or examination process but may be made available if no possibility of such compromise exists.

[40 FR 44484, Sept. 26, 1975, as amended at 44 FR 50804, Aug. 30, 1979; 50 FR 50284, Dec. 10, 1985]

§ 9.62 Special procedures.

(a) *Records under the control of another government agency.* (1) *Medical records.* Requests received by NRC pertaining to medical records under the control of the U.S. Public Health Service or another Government agency will either be referred to the appropriate agency or returned to the requestor with the name of the controlling Government agency, if known, within ten working days after receipt by NRC. NRC will inform the requestor of any referral of his request to another Government agency at the time the referral is made.

(2) *Nonmedical records.* Requests received by NRC pertaining to nonmedical records under the control of another Government agency will be returned to the requestor with the name of the controlling Government agency, if known, within ten working days after receipt by NRC.

[40 FR 44484, Sept. 26, 1975, as amended at 41 FR 44997, Oct. 14, 1976]

DETERMINATIONS AND APPEALS

§ 9.65 Access determinations; appeals.

(a) *Initial determinations.* For agency records located in the Office of the Inspector General, the Assistant Inspector General for Audits or the Assistant Inspector General for Investigations shall determine whether access to the record is available under the Privacy Act. For all other agency records, the Director, Office of Administration, or the Director's designee, with the advice of the system manager having control of the record to which access is requested, shall determine whether access to the record is available under the Privacy Act. The Director, Office of Administration, or the

Director's designee, shall notify the requesting individual in person or in writing of the determination. Unless the request presents unusual difficulties or invovles extensive numbers of records, individuals shall be notified of determinations to grant or deny access within 30 working days after receipt of the request.

(1) Notices granting access shall inform the individual when and where the requested record may be seen, how copies may be obtained, and of any fees or anticipated charges which may be incurred pursuant to § 9.85 of this subpart.

(2) Notices denying access must state the reasons for the denial, and advise the individual that the denial may be appealed to the Inspector General, for agency records located in the Office of Inspector General, or the Executive Director for Operations, for all other agency records, in accordance with the procedures set forth in this section.

(b) *Appeals from denials of access.* If an individual has been denied access to a record the individual may request a final review and determination of that individual's request by the Inspector General or the Executive Director for Operations as appropriate. A request for final review of an initial determination must be filed within 60 days of the receipt of the initial determination. For agency records denied by the Assistant Inspector General for Audits or the Assistant Inspector General for Investigations, the appeal must be in writing and addressed to the Inspector General, U.S. Nuclear Regulatory Commission, Washington, DC 20555. For agency records denied by the Director, Office of Administration, or the Director's designee, the appeal must be in writing addressed to the Executive Director for Operations. The appeal should clearly state on the envelope and in the letter "Privacy Act Appeal-Denial of Access." The NRC does not consider an appeal that is not marked as indicated in this paragraph as received until it is actually received by the Inspector General or Executive Director for Operations.

(c) *Final determinations.* (1) The Inspector General, or the Executive Director for Operations or the EDO's designee, shall make a final determination within 30 working days of the receipt of the request for final review, unless the time is extended for good cause shown such as the need to obtain additional information, the volume of records involved, or the complexity of the issue. The extension of time may not exceed 30 additional working days. The requester shall be advised in advance of any extension of time and of the reasons therefor.

(2) If the Inspector General, or the Executive Director for Operations or the EDO's designee, determines that access was properly denied because the information requested has been exempted from disclosure, the Inspector General, or the Executive Director for Operations or the EDO's designee shall undertake a review of the exemption to determine whether the information should continue to be exempt from disclosure. The Inspector General, or the Executive Director for Operations or the EDO's designee, shall notify the individual in writing of the final agency determination to grant or deny the request for access. Notices denying access must state the reasons therefor and must advise the individual of his/her right to judicial review pursuant to 5 U.S.C. 552a(g).

[40 FR 44484, Sept. 26, 1975, as amended at 41 FR 20645, May 20, 1976; 41 FR 25997, June 24, 1976; 52 FR 31609, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989; 55 FR 33647, Aug. 17, 1990]

§ 9.66 Determinations authorizing or denying correction of records; appeals.

(a) *Initial determinations.* (1) For agency records located in the Office of the Inspector General, the Assistant Inspector General for Audits or the Assistant Inspector General for Investigations shall determine whether to authorize or refuse correction or amendment of a record. For all other agency records, the Director, Office of Administration, or the Director's designee, with the advice of the system manager having control of the record, shall determine whether to authorize or refuse correction or amendment of a record. The Director, Office of Administration, or the Director's designee, shall notify the requesting individual. Unless the request presents unusual difficulties or involves extensive numbers of records, individuals must be notified of determinations to authorize or refuse correction or amendment of a record within 30 working days after receipt of the request. In making this determination, the NRC official shall be guided by the following standards:

(i) Records shall contain only such information about an individual as is relevant and necessary to accomplish an NRC function required to be accomplished by statute or by executive order of the President;

(ii) Records used by NRC in making any determination about any individual shall be as accurate, relevant, current, and complete as is reasonably necessary to assure fairness to the individual in the determination;

(iii) No record shall describe how any individual has exercised rights guaranteed by the First Amendment unless such record is expressly authorized by statute or by the individual about whom the record is maintained, or is pertinent to and within the scope of an authorized law enforcement activity.

(2) For agency records located in the Office of Inspector General, if correction or amendment of a record is authorized, the Assistant Inspector General for Audits or the Assistant Inspector General for Investigations shall correct or amend the record. For all other agency records, the Director, Office of Administration, or the Director's designee, shall correct or amend the record. The Director, Office of Administration, or the Director's designee shall notify the requesting individual in writing that the correction or amendment has been made and provide the individual with a courtesy copy of the corrected record.

(3) If correction or amendment of a record is refused, the Director, Office of Administration or the Director's designee, shall notify the requesting individual in writing of the refusal and the reasons therefor, and shall advise the individual that the refusal may be appealed to the Inspector General or the Executive Director for Operations, as appropriate, in accordance with the procedures set forth in this section.

(b) *Appeals from initial adverse determinations.* If an individual's request to amend or correct a record has been denied, in whole or in part, the individual may request a final review and determination of that individual's request by the Inspector General or the Executive Director for Operations, as appropriate. A request for final review of an initial determination must be filed within 60 days of the receipt of the initial determination. For agency records located in the Office of the Inspector General, the appeal must be in writing and addressed to the Inspector General, U.S. Nuclear Regulatory Commission, Washington, DC 20555. For agency records located in all other offices, the appeal must be in writing addressed to the Executive Director for Operations. The appeal should clearly state on the envelope and in the letter "Privacy Act Correction Appeal." The NRC does not consider an appeal that is not marked as indicated in this paragraph as received until it is actually received by the Inspector General or Executive Director for Operations. Requests for final review must set forth the specific item of information sought to be corrected or amended and should include, where appropriate, documents supporting the correction or amendment.

(c) *Final determinations.* (1) The Inspector General, for agency records located in the Office of the Inspector General, or the Executive Director for Operations or the EDO's designee, for all other ageny records, shall make a final agency determination within 30 working days of receipt of the request for final review, unless the time is extended for good cause shown such as the need to obtain additional information, the volume of records involved, or the complexity of the issue. The extension of time may not exceed 30 additional working days. The requester shall be advised in advance of any extension of time and of the reasons therefor.

(2) For agency records located in the Office of the Inspector General, if the Inspector General makes a final determination that an amendment or correction of the record is warranted on the facts, the Inspector General or the IG's designee, shall correct or amend

the record pursuant to the procedures in § 9.66(a)(2). For all other agency records, if the Executive Director for Operations, or the EDO's designee, makes a final determination that an amendment or correction of the record is warranted on the facts, the EDO or the EDO's designee, shall notify the Director, Office of Administration, to correct or amend the record to the procedures in § 9.66(a)(2).

(3) If the Inspector General, or the Executive Director for Operations or the EDO's designee, makes a final determination that an amendment or correction of the record is not warranted on the facts, the individual shall be notified in writing of the refusal to authorize correction or amendment of the record in whole or in part, and of the reasons therefor, and the individual shall be advised of his/her right to provide a "Statement of Disagreement" for the record and of his/her right to judicial review pursuant to 5 U.S.C. 552a(g).

[40 FR 44484, Sept. 26, 1975, as amended at 41 FR 20645, May 20, 1976; 41 FR 25997, June 24, 1976; 52 FR 31609, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989; 55 FR 33647, Aug. 17, 1990]

§ 9.67 Statements of disagreement.

(a) Written "Statements of Disagreement" may be furnished by the individual within 30 working days of the date of receipt of the final adverse determination of the Inspector General or the Executive Director for Operations. "Statements of Disagreement" must be addressed, as appropriate, to the Inspector General or the Executive Director for Operations, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and should be clearly marked on the statement and on the envelope "Privacy Act Statement of Disagreement".

(b) The Inspector General or the Executive Director for Operations, or their designees, as appropriate, are responsible for ensuring that: (1) The "Statement of Disagreement" is included in the system or systems of records in which the disputed item of information is maintained; and (2) the original record is marked to indicate the information disputed, the existence of a "Statement of Disagreement" and the location of the "Statement of Disagreement" within the system of records.

[55 FR 33848, Aug. 17, 1990]

§ 9.68 NRC statement of explanation.

The Inspector General, or the Executive Director for Operations or the EDO's designee, may if deemed appropriate, prepare a concise statement of the reasons why the requested amendments or corrections were not made. Any NRC "Statement of Explanation" must be included in the system of records in the same manner as the "Statement of Disagreement". Courtesy copies of the NRC statement and of the notation of the dispute as marked on the original record must be furnished to the individual who requested correction or amendment of the record.

[55 FR 33648, Aug. 17, 1990]

§ 9.69 Notices of correction or dispute.

(a) When a record has been corrected upon request or when a "Statement of Disagreement" has been filed, the Director, Office of Administration, or his designee, shall, within 30 working days thereof, advise all prior recipients of the affected record whose identity can be determined pursuant to an accounting of disclosures required by the Privacy Act or any other accounting previously made, of the correction or of the filing of the "Statement of Disagreement".

(b) Any disclosure of disputed information occurring after a "Statement of Disagreement" has been filed shall clearly identify the specific information disputed and be accompanied by a copy of the "Statement of Disagreement" and a copy of any NRC "Statement of Explanation".

[40 FR 44484, Sept. 26, 1975, as amended at 52 FR 31609, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

DISCLOSURE TO OTHERS OF RECORDS ABOUT INDIVIDUALS

§ 9.80 Disclosure of record to persons other than the individual to whom it pertains.

(a) NRC Commissioners and NRC personnel shall not disclose any record which is contained in a system of records maintained by NRC by any means of communication to any person, or to another Government agency, except pursuant to a written request by, or with the prior written consent of, the individual to whom the record pertains, unless disclosure of the record is:

(1) To NRC Commissioners and NRC personnel who have a need for the record in the performance of their duties;

(2) Required under 5 U.S.C. 552;

(3) For a routine use published in the FEDERAL REGISTER;

(4) To the Bureau of the Census for purposes of planning or carrying out a census or survey or related activity pursuant to the provisions of Title 13 of the United States Code;

(5) To a recipient who has provided the agency with advance adequate written assurance that the record will be used solely as a statistical research or reporting record and the record is transferred in a form that is not individually identifiable. The advance written statement of assurance shall (i) state the purpose for which the record is requested, and (ii) certify that the record will be used only for statistical purposes. Prior to release for statistical purposes in accordance with the provisions of this paragraph, the record shall be stripped of all personally identifying information and reviewed to ensure that the identity of any individual cannot reasonably be determined by combining two or more statistical records;

(6) To the National Archives of the United States as a record which has sufficient historical or other value to warrant its continued preservation by the United States Government, or to the Administrator of General Services or his designee for evaluation to determine whether the record has such value;

(7) To another agency or to an instrumentality of any governmental jurisdiction within or under the control of the United States for a civil or criminal law enforcement activity if the activity is authorized by law, and if the head of the agency or instrumentality has made a written request to the NRC specifying the particular portion of the record desired and the law enforcement activity for which the record is sought. A record may be disclosed to a law enforcement agency at the initiative of the NRC if criminal conduct is suspected, provided that such disclosure has been established as a routine use by publication in the FEDERAL REGISTER, and the instance of misconduct is directly related to the purpose for which the record is maintained;

(8) To any person upon a showing of compelling circumstances affecting the health or safety of any individual;

(9) To either House of Congress or, to the extent of matter within its jurisdiction, to any committee or subcommittee thereof or to any joint committee of the Congress or to any subcommittee of such joint committee;

(10) To the Comptroller General, or any of his authorized representatives, in the course of the performance of the duties of the General Accounting Office; or

(11) Pursuant to the order of a court of competent jurisdiction.

§ 9.81 Notices of subpoenas.

When records concerning an individual are subpoenaed or otherwise disclosed pursuant to court order, the NRC officer or employee served with the subpoena shall be responsible for assuring that the individual is notified of the disclosure within five days after such subpoena or other order becomes a matter of public record. The notice shall be mailed to the last known address of the individual and shall contain the following information: (a) The date the subpoena is returnable; (b) the court in which it is returnable; (c) the name and number of the case or proceeding; and (d) the nature of the information sought.

§ 9.82 Notices of emergency disclosures.

When information concerning an individual has been disclosed to any person under compelling circumstances affecting health or safety, the NRC officer or employee who made or authorized the disclosure shall notify the individual at his last known address within five days of the disclosure. The notice shall contain the following information: (a) The nature of the information disclosed; (b) the person or agency to whom the information was disclosed; (c) the date of the disclosure; and (d) the compelling circumstances justifying the disclosure.

FEES

§ 9.85 Fees.

Fees shall not be charged for search for or review of records requested pursuant to this subpart or for making copies or extracts of records in order to make them available for review. Fees established pursuant to 31 U.S.C. 483c and 5 U.S.C. 552a(f)(5) shall be charged according to the schedule contained in § 9.35 of this part for actual copies of records requested by individuals, pursuant to the Privacy Act of 1974, unless the Director, Division of Freedom of Information and Publications Services, waives the fee because of the inability of the individual to pay or because making the records available without cost, or at a reduction in cost, is otherwise in the public interest.

[52 FR 49362, Dec. 31, 1987, as amended at 53 FR 52993, Dec. 30, 1988]

ENFORCEMENT

§ 9.90 Violations.

(a) An injunction or other court order may be obtained pursuant to 5 U.S.C. 552a(g) (1-3) to compel NRC to permit an individual to review, amend or copy a record pertaining to him, or to be accompanied by someone of his own choosing when he reviews his record. A court order may be obtained for the payment of a civil penalty imposed pursuant to 5 U.S.C. 552a(g)(4) if NRC intentionally or willfully fails to maintain a record accurately, or fails to comply with any provision of 5 U.S.C. 552a, or any provision of this subpart, if such failure results in an adverse determination or has an adverse effect on an individual. Court costs and attorney's fees may be awarded in civil actions.

(b) Any officer or employee of NRC who willfully maintains a system of records without meeting the notice requirements of 5 U.S.C. 552a(e)(4), or who willfully discloses information knowing such disclosure to be prohibited by 5 U.S.C. 552a or by any rules or regulations issued thereunder, may be guilty of a criminal misdemeanor and upon conviction may be fined up to $5000. Any person who knowingly and willfully requests or obtains any record concerning an individual from NRC under false pretenses may be convicted of a criminal misdemeanor and upon conviction may be fined up to $5,000.

EXEMPTIONS

§ 9.95 Specific exemptions.

The following records, contained in the designated NRC Systems of Records (NRC-5, NRC-9, NRC-11, NRC-18, NRC-22, NRC-28, NRC-29, NRC-31, NRC-33, NRC-37, NRC-39, and NRC-40) are exempt from 5 U.S.C. 552a(c)(3), (d), (e)(i), (e)(4) (G), (H), (I), and (f) in accordance with 5 U.S.C. 552a(k). Each of these records is subject to the provisions of § 9.61:

(a) Contracts Records Files, NRC-5;

(b) Equal Employment Opportunity Records Files, NRC-9;

(c) General Personnel Records (Official Personnel Folder and Related Records), NRC-11;

(d) Investigative Offices Index, Files, and Associated Records, NRC-18;

(e) Personnel Performance Appraisals, NRC-22;

(f) Recruiting, Examining, and Placement Records, NRC-28;

(g) Document Control System, NRC-29;

(h) Correspondence and Records Branch, Office of the Secretary, NRC-31;

(i) Special Inquiry File, NRC-33;

(j) Information Security Files and Associated Records, NRC-37;

(k) Personnel Security Files and Associated Records, NRC-39; and

(l) Facility Security Support Files and Associated Records, NRC-40.

[52 FR 760, Jan. 9, 1987]

Subpart C—Government in the Sunshine Act Regulations

Source: 42 FR 12877, Mar. 7, 1977, unless otherwise noted.

§ 9.100 Scope of subpart.

This subpart prescribes procedures pursuant to which NRC meetings shall be open to public observation pursuant to the provisions of 5 U.S.C. 552b. This subpart does not affect the procedures pursuant to which NRC records are made available to the public for inspection and copying which remain governed by Subpart A, except that the exemptions set forth in § 9.104(a) shall govern in the case of any request made pursuant to § 9.23 to copy or inspect the transcripts, recordings, or minutes described in § 9.108. Access to records considered at NRC meetings shall continue to be governed by Subpart A of this part.

[52 FR 49362, Dec. 31, 1987]

§ 9.101 Definitions.

As used in this subpart:

(a) "Commission" means the collegial body of five Commissioners or a quorum thereof as provided by section 201 of the Energy Reorganization Act of 1974, or any subdivision of that collegial body authorized to act on its behalf, and shall not mean any body not composed of members of that collegial body.

(b) "Commissioner" means an individual who is as member of the Commission.

(c) "Meeting" means the deliberations of at least a quorum of Commissioners where such deliberations determine or result in the joint conduct or disposition of official Commission business, that is, where discussions are sufficiently focused on discrete proposals or issues as to cause or to be likely to cause the individual participating members to form reasonably firm positions regarding matters pending or likely to arise before the agency. Deliberations required or permitted by §§ 9.105, 9.106, or 9.108(c) do not constitute "meetings" within this definition.

(d) "Closed meeting" means a meeting of the Commission closed to public observation as provided by § 9.104.

(e) "Open meeting" means a meeting of the Commission open to public observation pursuant to this subpart.

(f) "Secretary" means the Secretary to the Commission.

(g) "General Counsel" means the General Counsel of the commission as provided by section 25(b) of the Atomic Energy Act of 1954 and section 201(f) of the Energy Reorganization Act of 1974, and, until such time as the offices of that officer are in the same location as those of the Commission, any member of his office specially designated in writing by him pursuant to this subsection to carry out his responsibilities under this subpart.

[42 FR 12877, Mar. 7, 1977, as amended at 50 FR 20891, May 21, 1985]

§ 9.102 General requirement.

Commissioners shall not jointly conduct or dispose of Commission business in Commission meetings other than in accordance with this subpart. Except as provided in § 9.104, every portion of every meeting of the Commission shall be open to public observation.

§ 9.103 General provisions.

The Secretary shall ensure that all open Commission meetings are held in a location such that there is reasonable space and adequate visibility and acoustics, for public observation. No additional right to participate in Commission meetings is granted to any person by this subpart. An open meeting is not part of the formal or informal record of decision of the matters discussed therein except as otherwise required by law. Statements of views or expressions of opinion made by Commissioners or NRC employees at open meetings are not intended to represent final determinations or beliefs. Such statements may not be pleaded, cited, or relied upon before the Commission or in any proceeding under Part 2 of these regulations (10 CFR Part 2) except as the Commission may direct. Members of the public attending open Commission meetings may use small electronic sound recorders to record the meeting, but the use of other electronic recording equipment and cameras requires the advance written approval of the Secretary.

[42 FR 12877, Mar. 7, 1977, as amended at 43 FR 13055, Mar. 29, 1978; 43 FR 37421, Aug. 23, 1978]

§ 9.104 Closed meetings.

(a) Except where the Commission finds that the public interest requires otherwise, Commission meetings shall be closed, and the requirements of §§ 9.105 and 9.107 shall not apply to any information pertaining to such meeting otherwise required by this subpart to be disclosed to the public, where the Commission determines in accordance with the procedures of § 9.105 that opening such meetings or portions thereof or disclosing such information, is likely to:

(1) Disclose matters that are (i) specifically authorized under criteria established by an Executive order to be kept secret in the interests of national defense or foreign policy, and (ii) in fact properly classified pursuant to such Executive order;

(2) Relate solely to the internal personnel rules and practices of the Commission;

(3) Disclose matters specifically exempted from disclosure by statute (other than 5 U.S.C. 552) provided that such statute (i) requires that the matters be withheld from the public in such a manner as to leave no discretion on the issue, or (ii) establishes particular criteria for withholding or refers to particular types of matters to be withheld;

(4) Disclose trade secrets and commercial or financial information obtained from a person and privileged or confidential, including such information as defined in § 2.790(d) of this title;

(5) Involve accusing any person of a crime, imposing a civil penalty on any person pursuant to 42 U.S.C. 2282 or 42 U.S.C. 5846, or any revocation of any license pursuant to 42 U.S.C. Sec. 2236, or formally censuring any person;

(6) Disclose information of a personal nature where such disclosure would constitute a clearly unwarranted invasion of personal privacy;

(7) Disclose investigatory reports compiled for law enforcement purposes, including specifically enforcement of the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 *et seq.*, and the Energy Reorganization Act of 1974, as amended, 42 U.S.C. 5801 *et seq.*, or information which if written would be contained in such records, but only to the extent that the production of such records or information would: (i) Interfere with enforcement proceedings, (ii) deprive a person of a right to a fair trial or an impartial adjudication, (iii) constitute an unwarranted invasion of personal privacy, (iv) disclose the identity of a confidential source and, in the case of a record compiled by a criminal law enforcement authority in the course of a criminal investigation, or by an agency conducting a lawful national security intelligence investigation, confidential information furnished only by the confidential source, (v) disclose investigative techniques and procedures, or (vi) endanger the life or physical safety of law enforcement personnel;

(8) [Reserved]

(9) Disclose information the premature disclosure of which would be likely to significantly frustrate implementation of a proposed Commission action, except that this subparagraph shall not apply in any instance where the Commission has already disclosed to the public the content or nature of its proposed action, or where the Commission is required to make such disclosure on its own initative prior to taking final action on such proposal; or

(10) Specifically concern the Commission's issuance of a subpoena, or the Commission's participation in a civil action or proceeding or an action or proceeding before a state or federal administrative agency, an action in a foreign court or international tribunal, or an arbitration, or the initiation, conduct or disposition by the Commission of a particular case of formal agency adjudication pursuant to 5 U.S.C. 554 or otherwise involving a determination on the record after an op-

portunity for a hearing pursuant to Part 2 or similar provisions.

(b) Examples of situations in which Commission action may be deemed to be significantly frustrated are: (1) If opening any Commission meeting or negotiations would be likely to disclose information provided or requests made to the Commission in confidence by persons outside the Commission and which would not have been provided or made otherwise; (2) if opening a meeting or disclosing any information would reveal legal or other policy advice, public knowledge of which could substantially affect the outcome or conduct of pending or reasonably anticipated litigation or negotiations; or (3) if opening any meeting or disclosing any information would reveal information requested by or testimony or proposals to be given to other agencies of government, including the Congress and the Executive Branch before the requesting agency would receive the information, testimony or proposals. The examples in the above sentence are for illustrative purposes only and are not intended to be exhaustive.

§ 9.105 Commission procedures.

(a) Action under § 9.104 shall be taken only when a majority of the entire membership of the Commission votes to take such action. A separate vote of the Commissioners shall be taken with respect to each Commission meeting a portion or portions of which are proposed to be closed to the public pursuant to § 9.104, or which respect to any information which is proposed to be withheld under § 9.105(c). A single vote may be taken with respect to a series of meetings, a portion or portions of which are proposed to be closed to the public, or with respect to any information concerning such series of meetings, so long as each meeting in such series involves the same particular matters and is scheduled to be held no more than thirty days after the initial meeting in such series. The vote of each Commissioner participating in such vote shall be recorded and no proxies shall be allowed.

(b) Within one day of any vote taken pursuant to paragraph (a) of this section, § 9.106(a) or § 9.108(c) the Secretary shall make publicly available in the Public Document Room a written copy of such vote reflecting the vote of each member on the question. If a portion of a meeting is to be closed to the public, the Secretary shall, within one day of the vote taken pursuant to paragraph (a) of this section or § 9.106(a), make publicly available in the Public Document Room a full written explanation of its action closing the portion together with a list of all persons expected to attend the meeting and their affiliation.

(c) The notices and lists required by paragraph (b) of this section to be made public may be withheld from the public to the extent that the Commission determines that such information itself would be protected against disclosure by § 9.104(a). Any such determination shall be made independently of the Commission's determination pursuant to paragraph (a) of this section to close a meeting, but in accordance with the procedure of that subsection. Any such determination, including a written explanation for the action and the specific provision or provisions of § 9.104(a) relied upon, must be made publicly available to the extent permitted by the circumstances.

§ 9.106 Persons affected and motions for reconsideration.

(a) Whenever any person whose interests may be directly affected by a portion of a meeting requests that the Commission close such portion to the public for any of the reasons referred to in paragraphs (a) (5), (6), or (7) of § 9.104, the Commission, upon request of any one Commissioner, shall vote by recorded vote whether to close such meeting.

(b) Any person may petition the Commission to reconsider its action under § 9.105(a) or paragraph (a) of this section by filing a petition for reconsideration with the Commission within seven days after the date of such action and before the meeting in question is held.

(c) A petition for reconsideration filed pursuant to paragraph (b) of this section shall state specifically the grounds on which the Commission action is claimed to be erroneous, and shall set forth, if appropriate, the public interest in the closing or opening of the meeting. The filing of such a petition shall not act to stay the effectiveness of the Commission action or to postpone or delay the meeting in question unless the Commission orders otherwise.

§ 9.107 Public announcement of Commission meetings.

(a) In the case of each meeting, the Secretary shall make public announcement, at least one week before the meeting, of the time, place, and subject matter of the meeting, whether it is to be open or closed to the public, and the name and phone number of the official designated by the Commission to respond to requests for information about the meeting. Such announcement shall be made unless a majority of the members of the Commission determines by a recorded vote that Commission business requires that such meeting be called at an earlier date, in which case the Secretary shall make public announcement of the time, place and subject matter of such meeting, and whether open or closed to the public, at the earliest practical time.

(b) The time or place of a meeting may be changed following the public announcement required by paragraph (a) of this section only if the Secretary publicly announces such changes at the earliest practicable time. The subject matter of as meeting, or the determination of the Commission to open or close a meeting, or portion of a meeting, to the public, may be changed following the public announcement required by this subsection only if: (1) A majority of the entire membership of the Commission determines by a recorded vote that Commission business so requires and that no earlier announcement of the change was possible, and (2) the Secretary publicly announces such change and the vote of each member upon such change at the earliest practicable time.

(c) Immediately following each public announcement required by this section, notice of the time, place, and subject matter of a meeting, whether the meeting is open or closed, any change in one of the preceding, and the name and phone number of the official designated by the Commission to respond to requests for information about the meeting, shall also be submitted for publication in the FEDERAL REGISTER.

(d) The public announcement required by paragraph (a) of this section shall consist of the Secretary:

(1) Publicly posting a copy of the document in the Public Document Room at 2120 L Street, NW., Washington, D.C.; and, to the extent appropriate under the circumstances;

(2) Mailing a copy to all persons whose names are on a mailing list maintained for this purpose;

(3) Submitting a copy for possible publication to at least two newspapers of general circulation in the Washington, D.C. metropolitan area;

(4) Any other means which the Secretary believes will serve to further inform any persons who might be interested.

(e) Action under the second sentence of paragraph (a) or (b) of this section shall be taken only when the Commission finds that the public interest in prompt Commission action or the need to protect the common defense or security or to protect the public health or safety overrides the public interest in having full prior notice of Commission meetings.

[42 FR 12877, Mar. 7, 1977, as amended at 53 FR 43420, Oct. 27, 1988]

§ 9.108 Certification, transcripts, recordings and minutes.

(a) For every meeting closed pursuant to paragraphs (a) (1) through (10) of § 9.104 and for every determination pursuant to § 9.105(c), the General Counsel shall publicly certify at the time of the public announcement of the meeting, or if there is no public announcement at the earliest practical time, that, in his or her opinion, the meeting may be closed to the public and shall state each relevant exemptive provision unless the Commission votes pursuant to § 9.105(c) that such certification is protected against disclosure by § 9.104(a). A copy of such certification, together with a statement from the presiding officer of the meeting setting forth the time and place of the meeting, and the persons present, shall be retained by the Commission. The Commission shall maintain a complete transcript or electronic recording adequate to record fully the proceedings of each meeting, or portion of a meeting closed to the public, except that in the case of a meeting, or portion of a meeting, closed to the public pursuant to paragraph (c)(10) of § 9.104, the Commission shall maintain such a transcript, or recording or a set of minutes. Such minutes shall fully and clearly describe all matters discussed and shall provide a full and accurate summary of any actions taken, and the reasons therefor, including a description of each of the views expressed on any item and the record of any rollcall vote (reflecting the vote of each Commissioner on the question). All documents considered in connection with any action shall be identified in such minutes.

(b) The Commission shall make promptly available to the public, in the Public Document Room, the transcript, electronic recording, or minutes (as required by paragraph (a) of this section) of the discussion of any item on the agenda, or of any item of the testimony of any witness received at the meeting, except for such item or items of such discussion or testimony as the Commission determines pursuant to paragraph (c) of this section to contain information which may be withheld under § 9.104 or § 9.105(c). Copies of such transcript, or minutes, or a transcription of such recording disclosing the identity of each speaker, shall be furnished to any person upon payment of the actual cost of duplication or transcription as provided in § 9.14. The Secretary shall maintain a complete verbatim copy of the transcript, a complete copy of the minutes, or a complete electronic recording of each meeting, or portion of a meeting, closed to the public, for a period of at least two years after such meeting, or until one year after the conclusion of any Commission proceeding with respect to which the meeting or portion was held, whichever occurs later.

(c) In the case of any meeting closed pursuant to § 9.104, the Secretary of the Commission, upon the advice of the General Counsel and after consultation with the Commission, shall determine which, if any, portions of the electronic recording, transcript or minutes and which, if any, items of information withheld pursuant to § 9.105(c) contain information which should be withheld pursuant to § 9.104, in the event that a request for the recording, transcript, or minutes is received within the period during which the recording, transcript, or minutes must be retained, under paragraph (b) of this section.

(d) If at some later time the Commission determines that there is no further justification for withholding any transcript, recording or other item of information from the public which has previously been withheld, then such information shall be made available.

[42 FR 12877, Mar. 7, 1977, as amended at 50 FR 20891, May 21, 1985]

§ 9.109 Report to Congress.

The Secretary shall annually report to the Congress regarding the Commission's compliance with the Government in the Sunshine Act, including a tabulation of the total number of open meetings, the total number of closed meetings, the reasons for closing such meetings and a description of any litigation brought against the Commission pursuant to the Government in the Sunshine Act, including any cost assessed against the Commission in such litigation (whether or not paid by the Commission).

Subpart D—Production or Disclosure in Response to Subpoenas or Demands of Courts or Other Authorities

Source: 50 FR 37645, Sept. 17, 1985, unless otherwise noted.

§ 9.200 Scope of subpart.

(a) This subpart sets forth the procedures to be followed when a subpoena, order, or other demand (hereinafter referred to as a "demand") for the production of NRC records or disclosure of NRC information, including testimony regarding such records, is issued by a court or other judicial or quasi-judicial authority in a proceeding, excluding Federal grand jury proceedings, to which the NRC is not a party. Information and documents subject to this subpart include:

(1) Any material contained in the files of the NRC;

(2) Any information relating to material contained in the files of the NRC.

(b) For purposes of this subpart, the term "employee of the NRC" includes all NRC personnel as that term is defined in § 9.3 of this part, including NRC contractors.

(c) This subpart is intended to provide instructions regarding the internal operations of the NRC and is not intended, and does not, and may not, be relied upon to create any right or benefit, substantive or procedural, enforceable at law by a party against the NRC.

[50 FR 37645, Sept. 17, 1985, as amended at 52 FR 49362, Dec. 31, 1987]

§ 9.201 Production or disclosure prohibited unless approved by appropriate NRC Official.

No employee of the NRC shall, in response to a demand of a court or other judicial or quasi-judicial authority, produce any material contained in the files of the NRC or disclose, through testimony or other means, any information relating to material contained in the files of the NRC, or disclose any information or produce any material acquired as part of the performance of that employee's official duties or official status without prior approval of the appropriate NRC official. When the demand is for material contained in the files of the Office of the Inspector General or for information acquired by an employee of that Office, the Inspector General is the appropriate NRC official. In all other cases, the General Counsel is the appropriate NRC official.

[55 FR 33648, Aug. 17, 1990]

§ 9.202 Procedure in the event of a demand for production or disclosure.

(a) Prior to or simultaneous with a demand upon an employee of the NRC for the production of material or the disclosure of information described in § 9.200, the party seeking production or disclosure shall serve the General Counsel of the NRC with an affidavit or statement as described in paragraphs (b) (1) and (2) of this section. Except for employees in the Office of Inspector General, whenever a demand is made upon an employee of the NRC for the production of material or the disclosure of information described in § 9.200, that employee shall immediately notify the General Counsel. If the demand is made upon a regional NRC employee, that employee shall immediately notify the Regional Counsel who, in turn, shall immediately request instructions from the General Counsel. If the demand is made upon an employee in the Office of Inspector General, that employee shall immediately notify the Inspector General. The Inspector General shall immediately provide a copy of the demand to the General Counsel, and as deemed necessary, consult with the General Counsel.

(b)(1) If oral testimony is sought by the demand, a summary of the testimony desired must be furnished to the General Counsel by a detailed affidavit or, if that is not feasible, a detailed statement by the party seeking the testimony or the party's attorney. This requirement may be waived by the General Counsel in appropriate circumstances.

(2) The General Counsel may request a plan from the party seeking discovery of all demands then reasonably foreseeable, including but not limited to, names of all NRC personnel from whom discovery is or will be sought, areas of inquiry, length of time away from duty involved, and identification of documents to be used in each deposition, where appropriate.

(c) The Inspector General or the General Counsel will notify the employee and such other persons, as circumstances may warrant, of the decision on the matter.

[50 FR 37645, Sept. 17, 1985, as amended at 55 FR 33648, Aug. 17, 1990]

§ 9.203 Procedure where response to demand is required prior to receiving instructions.

If a response to the demand is required before the instructions from the Inspector General or the General Counsel are received, a U.S. attorney or NRC attorney designated for the purpose shall appear with the employee of the NRC upon whom the demand has been made, and shall furnish the court or other authority with a copy of the regulations contained in this subpart and inform the court or other authority that the demand has been, or is being, as the case may be, referred for the prompt consideration of the appropriate NRC official and shall respectfully request the court or authority to stay the demand pending receipt of the requested instructions. In the event that an immediate demand for production or disclosure is made in circumstances which would preclude the proper designation or appearance of a U.S. or NRC attorney on the employee's behalf, the employee shall respectfully request the demanding authority for sufficient time to obtain advice of counsel.

[55 FR 33649, Aug. 17, 1990]

§ 9.204 Procedure in the event of an adverse ruling.

If the court or other judicial or quasi-judicial authority declines to stay the effect of the demand in response to a request made in accordance with § 9.203 pending receipt of instructions, or if the court or other authority rules that the demand must be complied with irrespective of instructions not to produce the material or disclose the information sought, the employee upon whom the demand has been made shall respectfully decline to comply with the demand, citing these regulations and *United States ex rel. Touhy* v. *Ragen*, 340 U.S. 462 (1951).

PART 10—CRITERIA AND PROCEDURES FOR DETERMINING ELIGIBILITY FOR ACCESS TO RESTRICTED DATA OR NATIONAL SECURITY INFORMATION OR AN EMPLOYMENT CLEARANCE

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10.37 Attorney representation.
10.38 Certifications.

Authority: Secs. 145, 161, 68 Stat. 942, 948, as amended (42 U.S.C. 2165, 2201); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841); E.O. 10450, 3 CFR Parts 1949-1953 COMP., p. 936, as amended; E.O. 10865, 3 CFR 1959-1963 COMP., p. 398, as amended; 3 CFR Table 4.

Source: 47 FR 38676, Sept. 2, 1982, unless otherwise noted.

Subpart A—General Provisions

§ 10.1 Purpose.

This part establishes the criteria, procedures, and methods for resolving questions concerning: (a) The eligibility of individuals who are employed by or applicants for employment with NRC contractors, agents, and licensees of the NRC, individuals who are NRC employees or applicants for NRC employment, and other persons designated by the Executive Director for Operations of the NRC, for access to Restricted Data pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, or for access to national security information ; and (b) the eligibility of NRC employees, or the eligibility of applicants for employment with the NRC, for employment clearance. This part is published to implement such Statutes and Executive Orders 10865, 25 FR 1583 (February 24, 1960), and 10450, 18 FR 2489 (April 27, 1954).

§ 10.2 Scope.

The criteria and procedures in this part shall be used in determining eligibility for NRC access authorization and/or employment clearance involving:

(a) Employees (including consultants) of contractors and agents of the Nuclear Regulatory Commission and applicants for employment;

(b) Licensees of the NRC and their employees (including consultants) and applicants for employment; and

(c) NRC employees (including consultants) and applicants for employment;

(d) Any other person designated by the Executive Director for Operations of the Nuclear Regulatory Commission.

§ 10.3 [Reserved]

§ 10.4 Policy.

It is the policy of the Nuclear Regulatory Commission to carry out its responsibility for the security of the nuclear energy program in a manner consistent with traditional American concepts of justice. To this end, the Commission has established criteria for determining eligibility for access authorization and/or employment clearance and will afford those individuals described in § 10.2 the opportunity for administrative review of questions concerning their eligibility for access authorization and/or employment clearance.

§ 10.5 Definitions.

As used in this part:

(a) "Access authorization" means an administrative determination that an individual (including a consultant) who is employed by or an applicant for employment with the NRC, NRC contractors, agents, and licensees of the NRC, or other person designated by the Executive Director for Operations, is eligible for a security clearance for access to Restricted Data or national security information.

(b) "Hearing Examiner" means a qualified attorney appointed by the Director, Office of Administration, to conduct a hearing in accordance with this part.

(c) "Hearing Counsel" means an NRC attorney assigned by the General Counsel to prepare and administer hearings in accordance with this part.

(d) "Personnel Security Review Examiners" are persons designated by the Executive Director for Operations to conduct a review of the record in accordance with this part.

(e) "Commission" means the Nuclear Regulatory Commission of five members or a quorum thereof sitting as a body, as provided by section 201 of the Energy Reorganization Act of 1974, or its designee.

(f) "Employment Clearance" means an administrative determination that an individual (including a consultant) who is an NRC employee or applicant for NRC employment and other persons designated by the Executive Director for Operations of the NRC is eligible for employment or continued employment pursuant to subsection 145 b. of the Atomic Energy Act of 1954, as amended.

(g) "Eligible" or "Eligibility" means both initial eligibility and continued eligibility of an individual for access authorization and/or employment clearance.

(h) "National Security Information" means information that is owned by, produced for or by, or under the control of the United States Government, and that has been determined, pursuant to Executive Order 12356 or antecedent orders, to require protection against unauthorized disclosure, and is so designated.

(i) "Restricted Data" means all data concerning design, manufacture, or utilization of atomic weapons, the production of special nuclear material, or the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the Restricted Data category pursuant to section 142 of the Atomic Energy Act of 1954, as amended.

[47 FR 38676, Sept. 2, 1982, as amended at 51 FR 35999, Oct. 8, 1986; 52 FR 31609, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

Subpart B—Criteria for Determining Eligibility for Access to Restricted Data or National Security Information or an Employment Clearance

§ 10.10 Application of the criteria.

(a) The decision as to access authorization and/or employment clearance is a comprehensive, common-sense judgment, made after consideration of all the information, favorable or unfavorable, relevant to whether the granting of access authorization and/or employment clearance would not endanger the common defense and security and would be clearly consistent with the national interest.

(b) The criteria in § 10.11 set forth a number of the types of derogatory information used to assist in making determinations of eligibility for access authorization and/or employment clearance. These criteria are not exhaustive but contain the principal types of derogatory information which create a question as to the individual's eligibility for access authorization and/or employment clearance. While there must necessarily be adherence to such criteria, the NRC is not limited to them, nor precluded from exercising its judgment that information or facts in a case under its cognizance are derogatory although at variance with, or outside the scope of, the stated categories. These criteria are subject to continuing review and may be revised from time to time as experience and circumstances may make desirable.

(c) When the reports of investigation of an individual contain information reasonably tending to establish the truth of one or more of the items in the criteria, such information shall be regarded as derogatory and shall create a question as to the individual's eligibility for access authorization and/or employment clearance. A question concerning the eligibility of an individual for access authorization and/or employment clearance shall be resolved in accordance with the procedures set forth in § 10.20 *et seq.*

(d) In resolving a question concerning the eligibility or continued eligibility of an individual for access authorization and/or employment clearance, the following principles shall be applied by the Director, Division of Security, Hearing Examiners, and Personnel Security Review Examiners:

(1) Information reasonably tending to establish the truth of one or more of the items in the criteria shall be the basis for recommending denial or revocation of access authorization and/or employment clearance unless evidence to support faith in the individual's reliability and trust-worthiness is affirmatively shown.

(2) When deemed material to the deliberations, the extent of the activity, conduct, or condition, the period in which they occurred or existed, the length of time which has since elapsed, and the attitude and convictions of the individual shall be considered in determining whether the recommendation will be adverse or favorable.

§ 10.11 Criteria.

(a) The criteria for determining eligibility for access authorization and/or employment clearance shall relate, but not be limited, to the following where an individual:

(1) Committed, attempted to commit, aided, or abetted another who committed or attempted to commit

any act of sabotage, espionage, treason, sedition, or terrorism.

(2) Publicly or privately advocated actions that may be inimical to the interest of the United States, or publicly or privately advocated the use of force or violence to overthrow the Government of the United States or the alteration of the form of government of the United States by unconstitutional means.

(3) Knowingly established or continued a sympathetic association with a saboteur, spy, traitor, seditionist, anarchist, terrorist, or revolutionist, or with an espionage agent or other secret agent or representative of a foreign nation whose interests may be inimical to the interests of the United States, or with any person who advocates the use of force or violence to overthrow the Government of the United States or the alteration of the form of government of the United States by unconstitutional means.

(4) Joined or engaged in any activity knowingly in sympathy with or in support of any foreign or domestic organization, association, movement, group, or combination of persons which unlawfully advocates or practices the commission of acts of force or violence to prevent others from exercising their rights under the Constitution or laws of the United States or any State or any subdivisions thereof by unlawful means, or which advocate the use of force and violence to overthrow the Government of the United States or the alteration of the form of government of the United States by unconstitutional means. (Ordinarily, criteria (3) and (4) will not include chance or casual meetings or contacts limited to normal business or official relations.)

(5) Deliberately misrepresented, falsified or omitted relevant and material facts from or in a personnel security questionnaire, a personal qualifications statement, a personnel security interview, or any other information submitted pursuant this part.

(6) Willfully violated or disregarded security regulations or was grossly negligent with respect thereto to a degree which could endanger the common defense and security; or by intention or gross carelessness disclosed Restricted Data or national security information to any person not authorized to receive it.

(7) Has any illness or mental condition which in the opinion of competent medical authority may cause significant defect in the judgment or reliability of the individual.

(8) Has been convicted of crimes indicating habitual criminal tendencies.

(9) Has been convicted of a crime, or has a background, where the facts, circumstances, or conduct are of a nature indicating poor judgment, unreliabilty, or untrustworthiness.

(10) Is a user of alcohol habitually and to excess, or has been such without adequate evidence of rehabilitation.

(11) Has been, or is, a user of a drug or other substance listed in the schedules of Controlled Substances established pursuant to the Controlled Substances Act of 1970 (such as amphetamines, barbiturates, narcotics, etc.), except as prescribed or administered by a physician licensed to dispense drugs in the practice of medicine, without adequate evidence of rehabilitation.

(12) Refused, without satisfactory explanation, to answer questions before a congressional committee, Federal or state court, or Federal administrative body including the NRC regarding charges relevant to the individual's eligibility for access authorization and/or employment clearance.

(13) Engaged in any other conduct or is subject to any other circumstances which tend to show that the individual is not reliable or trustworthy, or which furnishes reason to believe that the individual may be subject to coercion, influence, or pressures which may cause the individual to act contrary to the national interest.

§ 10.12 Interview and other investigation.

(a) The Director, Division of Security, Office of Administration, may authorize the granting of access authorization and/or employment clearance on the basis of the information in the possession of the NRC or may authorize the conduct of an interview with the individual, if the individual consents to be interviewed, or such other investigation as the Director deems appropriate. On the basis of such interview and/or investigation, the Director may authorize the granting of access authorization and/or employment clearance.

(b) The individual may elect on constitutional or other grounds not to participate in an interview or other investigation; however, such refusal or failure to furnish or authorize the furnishing of relevant and material information is deemed to be derogatory information pursuant to § 10.11(a)(5) and (12).

(c) If the director, Division of Security, cannot make a favorable finding regarding the eligibility of an individual for access authorization and/or employment clearance, the question of the individual's eligibility shall be resolved in accordance with the procedures set forth in § 10.20 *et seq.*

[47 FR 38676, Sept. 2, 1982, as amended at 52 FR 31609, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

Subpart C—Procedures

§ 10.20 Purpose of the procedures.

These procedures establish methods for the conduct of hearings and administrative review of questions concerning an individual's eligibility for access authorization and/or employment clearance pursuant to the Atomic Energy Act of 1954, as amended, and Executive Orders 10450 and 10865, when a resolution favorable to the individual cannot be made on the basis of the interview or other investigation.

§ 10.21 Suspension of access authorization and/or employment clearance.

In those cases where information is received which raises a question concerning the continued eligibility of an individual for access authorization and/or employment clearance, the Director, Division of Security, through the Director, Office of Administration, shall forward to the Executive Director for Operations or a Deputy Executive Director, his or her recommendation as to whether the individual's access authorization and/or employment clearance should be suspended pending the final determination resulting from the operation of the procedures provided in this part. In making this recommendation the Director, Division of Security, shall consider such factors as the seriousness of the derogatory information developed, the degree of access of the individual to classified information, and the individual's opportunity by reason of his or her position to commit acts adversely affecting the national security. An individual's access authorization and/or employment clearance may not be suspended except by the direction of the Executive Director for Operations or a Deputy Executive Director.

[55 FR 4, Jan. 2, 1990]

§ 10.22 Notice to individual.

A notification letter, prepared by the Division of Security, approved by the Office of General Counsel, and signed by the Director, Office of Administration, shall be presented to each individual whose eligibility for access authorization and/or employment clearance is in question. Where practicable, such letter shall be presented to the individual in person. The letter will be accompanied by a copy of this part and shall state:

(a) That reliable information in the possession of the NRC has created a substantial doubt concerning the individual's eligibility for access authorization and/or employment clearance;

(b) The information that creates a substantial doubt regarding the individual's eligibility for access authorization and/or employment clearance, which shall be as comprehensive and detailed as the national security permits;

(c) That unless the individual files with the Director, Office of Administration, a written request for a hearing within 20 days of the individual's receipt of the notification letter, the Director, Division of Security, through the Director, Office of Administration, will submit a recommendation as to the final action to the Executive Director for Operations on the basis of the information in the possession of the NRC;

(d) That if the individual files a written request for a hearing with the Director, Office of Administration, the individual must file with that request a written answer under oath or affirmation which admits or denies specifically each allegation and each supporting fact contained in the notification letter. A general denial is not sufficient to controvert a specific allegation. If the individual is without knowledge, he or she shall so state and that statement shall operate as a denial. The answer shall also state any additional facts and information that the individual desires to have considered in explanation or mitigation of allegations in the notification letter. Failure to specifically deny or explain or deny knowledge of any allegation or supporting fact shall be deemed an admission that the allegation or fact is true;

(e) That if the individual does not want to exercise his or her right to a hearing, but does want to submit an answer to the allegations in the notification letter, the individual may do so by filing with the Director, Office of Administration, within 20 days of his receipt of the notification letter, a written answer in accordance with the requirements of paragraph (d) of this section;

(f) That the procedures in § 10.24 *et seq.* shall apply to any hearing and review.

[47 FR 38676, Sept. 2, 1982, as amended at 51 FR 35999, Oct. 8, 1986; 52 FR 31609, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

§ 10.23 Failure of individual to request a hearing.

(a) In the event the individual fails to file a written request for a hearing pursuant to § 10.22 within 20 days of his receipt of the notification letter, a recommendation as to the final action to be taken shall be made by the Director, Division of Security, through the Director, Office of Administration, to the Executive Director for Operations on the basis of the information in the possession of the NRC, including any answer filed by the individual.

(b) The Director, Office of Administration, may for good cause shown, at the request of the individual, extend the time for filing a written request for a hearing or for filing a written answer to the matters contained in the notification letter.

[47 FR 38676, Sept. 2, 1982, as amended at 52 FR 31609, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

§ 10.24 Procedures for hearing and review.

(a) Upon receipt of a timely filed request for a hearing and answer complying with the requirements set forth in § 10.22, the Director, Office of Administration, shall forthwith appoint a Hearing Examiner, and the General Counsel shall forthwith assign an NRC attorney to act as Hearing Counsel. The Director, Office of Administration, shall promptly notify the individual of the identity of the Hearing Examiner and proposed hearing date, which shall be selected with due regard for the convenience of the parties and their representatives.

(b) Within 72 hours of being notified of the identity of the Hearing Examiner, the individual may request that the Hearing Examiner be disqualified for cause by filing with the Director, Office of Administration, a written statement of the individual's reasons for seeking disqualification. The time for filing the request may be extended by the Director, Office of Administration, for good cause shown. If the Director, Office of Administration, grants the request the procedures of paragraph (a) of this section and this paragraph shall be followed just as though there had been no prior appointment.

(c) The individual shall have the right to appear at the hearing before the Hearing Examiner, to be represented by counsel or other representative, to introduce documentary or other evidence, and to call, examine, and cross-examine witnesses, subject to the provisions and limitations set forth in this part.

[47 FR 38676, Sept. 2, 1982, as amended at 51 FR 35999, Oct. 8, 1986; 52 FR 31609, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

§ 10.25 NRC Hearing Counsel.

(a) Hearing Counsel assigned pursuant to § 10.24 shall, prior to the scheduling of the hearing, review the information in the case and shall request the presence of witnesses and the production of documents and other physical evidence relied upon the Director, Division of Security, in making his or her finding that a question exists regarding the eligibility of the individual for NRC access authorization and/or employment clearance in accordance with the provisions of this part. When the presence of a witness and the production of documents and other physical evidence is deemed by the Hearing Counsel to be necessary or desirable for a determination of the issues, the Director, Division of Security, shall make arrangements for the production of such evidence and for such witnesses to appear at the hearing by subpoena or otherwise.

(b) Hearing Counsel is authorized to consult directly with individual's counsel or representative or the individual, if the individual is not so represented, for purposes of reaching mutual agreement upon arrangements for expeditious hearing of the case. Such arrangements may include clarification of issues and stipulations with respect to testimony and contents of documents and other physical evidence. Such stipulations when entered into shall be binding upon the individual and the NRC for the purposes of this part. Prior to any consultation with the individual, the Hearing Counsel shall advise the individual of his or her rights under this part, of his or her right to counsel or other representation, and of the possibility that any statement made by the individual to the Hearing Counsel may be used in subsequent proceedings.

(c) The individual is responsible for producing witnesses in his or her own behalf and/or presenting other evidence before the Hearing Examiner to support the individual's answer and defense to the allegations contained in the notification letter. When requested, however, Hearing Counsel shall assist the individual to the extent practicable and necessary. The Hearing Counsel may at his or her discretion request the Director, Division of Security, to arrange for the issuance of subpoenas for witnesses to attend the hearing in the individual's behalf, or for the production of specific documents or other physical evidence, provided a showing of the necessity for such assistance has been made.

§ 10.26 Appointment of Hearing Examiner.

The appointment of a Hearing Examiner, pursuant to § 10.24 of this part, shall be from a list of qualified attorneys possessing the highest degree of integrity, ability, and good judgment. To qualify, an attorney shall have an NRC "Q" access authorization and may be an employee of the NRC, its contractors, agents or licensees. However, no employee or consultant of the NRC shall serve as Hearing Examiner hearing the case of an employee (including a consultant) or applicant for employment with the NRC; nor shall any employee or consultant of an NRC contractor, agent or licensee serve as Hearing Examiner hearing the case of an employee (including a consultant) or an applicant for employment of that contractor, agent, or licensee. No Hearing Examiner shall be selected who has knowledge of the case or of any information relevant to the disposition of it, or who for any reason would be unable to issue a fair and unbiased recommendation.

§ 10.27 Prehearing proceedings.

(a) After the appointment of the Hearing Examiner, he or she shall be furnished the record in the case, which shall consist of the letter of notification, the request for hearing and its supporting answer, and the notice of hearing, if it has been issued, and any stipulations agreed to by the individual and the Hearing Counsel.

(b) The Hearing Examiner may on his or her own motion, or on that of either party, convene a prehearing conference with the Hearing Counsel and the individual and his or her counsel or representative, if any, for the purpose of clarifying the issues, identifying witnesses who may be called, identifying documents and other physical evidence that may be offered into evidence, and entering into stipulations of fact.

(c) The parties will be notified by the Hearing Examiner at least ten days in advance of the hearing of the time and place of the hearing. For good cause shown, the Hearing Examiner may order postponements or continuances from time to time. If, after due notice, the individual fails to appear at the hearing, or appears but is not prepared to proceed, the Hearing Examiner shall, unless good cause is shown, return the case to the Director, Division of Security, who shall make a recommendation on final action to be taken, through the Director, Office of Administration, to the Executive Director for Operations on the basis of the information in the possession of the NRC.

[47 FR 38676, Sept. 2, 1982, as amended at 52 FR 31609, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

§ 10.28 Conduct of hearing.

(a) The Hearing Examiner shall conduct the hearing in an orderly, impartial and decorous manner. Technical rules of evidence may be relaxed so that a full evidentiary record may be made based on all material and relevant facts. Hearsay evidence may for good cause shown be received at the discretion of the Hearing Examiner and accorded such weight as the circumstances warrant.

(b) The proceedings shall be open only to duly authorized representatives of the staff of the NRC, the individual, his or her counsel or representative, and such persons as may be officially authorized by the Hearing Examiner. Witnesses shall not testify in the presence of other witnesses except that the Hearing Examiner may, at his or her discretion, allow for expert witnesses to be present during testimony relevant to their own testimony.

(c) Witnesses, including the individual, shall be examined under oath or affirmation by the party who called them and may be cross-examined by the other. The Hearing Examiner shall rule on all evidentiary matters, may further examine any witness, and may call for additional witnesses or the production of documentary or other physical evidence if, in the exercise of his or her discretion, such additional evidence is deemed necessary to the resolution of an issue.

(d) If it appears during the hearing that Restricted Data or national security information may be disclosed, the Hearing Examiner shall assure that disclosure is made only to persons authorized to receive it.

(e) The Hearing Examiner may, at any time during the hearing, permit the Hearing Counsel to amend the notification letter to add or modify allegations to be considered. In the event of such an amendment to the notification letter, the individual shall be given an opportunity to answer the amended allegations. If the changes are of such a substantial nature that the individual cannot answer the amended allegations without additional time, the Hearing Examiner shall grant such additional time as he or she deems necessary.

(f) The Hearing Examiner may receive and consider evidence in the form of depositions or responses to interrogatories upon a showing that the witness is not available for good reason such as death, serious illness or similar cause, or in the form of depositions, interrogatories, affidavits or statements with agreement of the parties. The Hearing Examiner may take official notice at any stage of the proceeding, where appropriate, of any fact not subject to reasonable dispute in that it is either (1) generally known within the United States or (2) capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned. A party is entitled upon timely request to an opportunity to be heard as to the propriety of taking such official notice. In the absence of prior notification the request may be made after notice is taken.

(g) Hearing Counsel shall examine and cross-examine witnesses and otherwise assist the Hearing Examiner in such a manner as to bring out a full and true disclosure of all facts, both favorable and unfavorable, having a bearing on the issues before the Hearing Examiner. In performing these duties, the Hearing Counsel shall avoid the attitude of a prosecutor and shall always bear in mind that the proceeding is an administrative hearing and not a trial.

(h) Hearing Counsel shall not participate in the deliberations of the Hearing Examiner, and shall express no opinion to the Hearing Examiner concerning the merits of the case. Hearing Counsel shall also, during the course of the hearing, advise the individual of his or her rights under these procedures when the individual is not represented by counsel or other representative.

(i) The individual shall be afforded an opportunity to cross-examine persons who have made oral or written statements adverse to the individual relating to a controverted issue except that any such statement may be received and considered by the Hearing Examiner without affording such opportunity in either of the following circumstances:

(1) The head of the department or agency supplying the statement certifies that the person who furnished the information is a confidential informant who has been engaged in obtaining intelligence information for the Government and that disclosure of the informant's identity would substantially harm the national interest or would endanger the well-being of the informant.

(2) The Commission has determined, after considering the information furnished by the investigative agency concerning the reliability of the person who furnished the information and the accuracy of the statement concerned, that the statement appears to be reliable and material, and that failure of the Hearing Examiner to receive and consider such statement would, in view of the fact that access authorization and/or employment clearance is being sought, be substantially harmful to the national security and that the person who furnished the information cannot appear to testify due to death, serious illness, or similar cause.

(j)(1) Whenever the procedure under paragraph (i)(1) of this section is used, the individual shall be given a summary of the information which shall be as comprehensive and detailed as the national security permits.

(2) Whenever the procedure under paragraph (i)(2) is used, the individual shall be provided the identity of the person and the information to be considered.

(3) In both paragraph (i) (1) and (2) procedures, appropriate consideration shall be accorded to the fact that the individual did not have an opportunity to cross-examine such informant or person.

(k) Records provided by investigative agencies that were compiled as a regular or routine procedure by the business or agency from which obtained, or other physical evidence other than investigative reports, may be received and considered subject to rebuttal without authenticating witnesses, provided that the investigative agency furnished such information to the NRC pursuant to its responsibilities in connection with assisting the NRC in determining the individual's eligibility for access authorization and/or employment clearance.

(l) Records compiled in the regular course of business, or other physical evidence other than investigative reports, relating to a controverted issue which, because they are classified, may not be inspected by the individual, may be received and considered provided that:

(1) The Commission has made a determination that such records or other physical evidence appears to be material;

(2) The Commission has made a determination that failure to receive and consider such records or other physical evidence would, in view of the fact that access authorization and/or employment clearance is being sought, be substantially harmful to the national security; and

(3) To the extent that national security permits, a summary or description of such records or other physical evidence is made available to the individual. In every such case, information as to the authenticity and accuracy of such physical evidence furnished by the investigative agency shall be considered.

(m) If the Hearing Examiner determines that additional investigation of any material information is required, he or she shall request in writing that the Director, Office of Administration, arrange for the investigation and shall specify those issues upon which more evidence is requested and identify, where possible, any persons or sources that might provide the evidence sought.

(n) A written transcript of the entire proceeding shall be made by a person

sessing appropriate NRC access au-
rization and/or employment clear-
e and, except for portions contain-
Restricted Data or national securi-
nformation, or other lawfully with-
dable information, a copy of such
nscript shall be furnished the indi-
ual without cost.

FR 38676, Sept. 2, 1982, as amended at
FR 31609, Aug. 21, 1987; 54 FR 53316,
c. 28, 1989]

0.29 Recommendation of the Hearing Examiner.

a) The Hearing Examiner's findings
d recommendation shall be based
on the entire record consisting of
e transcript of the hearing, the doc-
nentary and other evidence adduced
erein, and the letter of notification
d answer. The Hearing Examiner
all also consider the circumstances
the receipt of evidence pursuant to
10.28, the individual's record of past
nployment, and the nature and sen-
tivity of the job the individual is or
ay be expected to perform.

(b) The Hearing Examiner shall
ake specific findings on each allega-
ion in the notification letter including
he reasons for his or her findings,
nd shall make a recommendation as
o the action which should be taken in
he case.

(c) The Hearing Examiner's recom-
nendation shall be predicated upon
is or her findings. If, after consider-
ng all the factors in light of the crite-
ria in this part, the Hearing Examiner
s of the opinion that granting or con-
tinuing access authorization and/or
employment clearance to the individ-
ual will not endanger the common de-
fense and security and will be clearly
consistent with the national interest, a
favorable recommendation shall be
made; otherwise, an adverse recom-
mendation shall be made.

(d) The Hearing Examiner shall submit his or her findings and recommendation in a signed report together with the record of the case to the Director, Office Administration, with the least practical delay.

(e) The Hearing Examiner shall not consider the possible impact of the loss of the individual's services upon the NRC program.

[47 FR 38676, Sept. 2, 1982, as amended at 52 FR 31609, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

§ 10.30 New evidence.

After the close of the hearing, in the event the individual discovers new evidence not previously available or known to him or her, the individual may petition the Hearing Examiner if the Hearing Examiner's recommendation has not yet been issued, or thereafter, the Director, Office of Administration, to reopen the record to receive that evidence. If the Hearing Examiner or the Director, respectively, deem it material and appropriate, the record may be reopened to accept the evidence either by stipulation, with the agreement of the Hearing Counsel, or in a reconvened hearing.

[47 FR 38676, Sept. 2, 1982, as amended at 52 FR 31610, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

§ 10.31 Actions on the recommendations.

(a) Upon receipt of the findings and recommendation from the Hearing Examiner, and the record, the Director, Office of Administration, shall forthwith transmit it to the Executive Director for Operations who at his or her discretion may return the record to the Director, Office of Administration, for further proceedings by the Hearing Examiner with respect to specific matters designated by the Executive Director for Operations;

(b)(1) In the event of a recommendation by the Hearing Examiner that an individual's access authorization and/or employment clearance be denied or revoked, the Executive Director for Operations shall immediately notify the individual in writing of the Hearing Examiner's findings with respect to each allegation contained in the notification letter, and that the individual has a right to request a review of his or her case by NRC Personnel Security Review Examiners and of the right to submit a brief in support of his or her contentions. The request for a review shall be submitted to the Executive Director for Operations within five days after the receipt of the notice. The brief shall be forwarded to the Executive Director for Operations, for transmission to the NRC Personnel Security Review Examiners, not later than 10 days after receipt of such notice.

(2) In the event the individual fails to request a review by NRC Personnel Security Review Examiners of an adverse recommendation within the prescribed time, the Executive Director for Operations may at his or her discretion request a review of the record of the case by NRC Personnel Security Review Examiners. The request shall set forth those matters at issue in the hearing on which the Executive Director for Operations desires a review by the NRC Personnel Security Review Examiners.

(c) Where the Hearing Examiner has made a recommendation favorable to the individual, the Executive Director for Operations may at his or her discretion request a review of the record of the case by NRC Personnel Security Review Examiners. If such a request is made, the Executive Director for Operations shall immediately cause the individual to be notified of that fact and of those matters at issue in the hearing on which the Executive Director for Operations desires a review by the NRC Personnel Security Review Examiners. The Executive Director for Operations shall further inform the individual that within 10 days of receipt of this notice, the individual may submit a brief concerning those matters at issue for the consideration of the NRC Personnel Security Review Examiners. The brief shall be forwarded to the Executive Director for Operations for transmission to the NRC Personnel Security Review Examiners.

(d) In the event of a request for a review pursuant to paragraphs (b) and (c) of this section, the Hearing Counsel may file a brief within 10 days of being notified by the Executive Director for Operations that a review has been requested. The brief shall be forwarded to the Executive Director for Operations for transmission to the NRC Personnel Security Review Examiners.

(e) The Hearing Counsel may also request a review of the case by NRC Personnel Security Review Examiners. The request for review, which shall set forth those matters at issue in the hearing on which the Hearing Counsel desires a review, shall be submitted to the Executive Director for Operations within five days after receipt of the Hearing Examiner's findings and recommendation. Within 10 days of the request for review, the Hearing Counsel may file a brief which shall be forwarded to the Executive Director for Operations for transmission to the NRC Personnel Security Review Examiners. A copy of the request for review, and a copy of any brief filed, shall be immediately sent to the individual. If the Hearing Counsel's request is for a review of a recommendation favorable to the individual, the individual may, within 10 days of receipt of a copy of the request for review, submit a brief concerning those matters at issue for consideration of the NRC Personnel Security Review Examiners. The brief shall be forwarded to the Executive Director for Operations for transmission to the NRC Personnel Security Review Examiners.

(f) The time limits imposed by this section for requesting reviews and the filing of briefs may be extended by the Executive Director for Operations for good cause shown.

(g) In the event a request is made for a review of the record by NRC Personnel Security Review Examiners, the Executive Director for Operations shall forthwith send the record, with all findings and recommendations and any briefs filed by the individual and the Hearing Counsel, to the NRC Personnel Security Review Examiners. If neither the individual, the Executive Director for Operations, nor the Hearing Counsel requests such a review, the final determination shall be made by the Executive Director for Operations on the basis of the record with all findings and recommendations.

[47 FR 38676, Sept. 2, 1982, as amended at 52 FR 31610, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

§ 10.32 Recommendation of the NRC Personnel Security Review Examiners.

(a) The Executive Director for Operations shall designate three NRC Personnel Security Review Examiners to conduct a review of the record of the case. To qualify as a Review Examiner, the person designated shall have an NRC "Q" access authorization and may be an employee of the NRC, its contractors, agents, or licensees. However, no employee or consultant of the NRC shall serve as Review Examiner reviewing the case of an employee (including a consultant) or applicant for employment with the NRC; nor shall any employee or consultant of an NRC contractor, agent or licensee serve as Review Examiner reviewing the case of an employee (including a consultant) or an applicant for employment of that contractor, agent, or licensee. No Review Examiner shall be selected who has knowledge of the case or of any information relevant to the disposition of it, or who for any reason would be unable to issue a fair and unbiased recommenation.

(b) The designated Review Examiners shall individually and independently, without consulting or otherwise communicating with one another, consider the matter under review based upon the record supplemented by any brief submitted by the individual or the Hearing Counsel. Review Examiners may request such additional briefs as any of them deems appropriate, which will be obtained by the Executive Director for Operations and provided to each Review Examiner. When a Review Examiner determines that additional evidence or further proceedings are necessary, the record may be returned to the Executive Director for Operations with a recommendation that the case be remanded to the Director, Office of Administration, for appropriate action, which may include returning the case to the Hearing Examiner and reconvening the hearing to obtain additional testimony.

(c) In conducting the review, Review Examiners shall make individual findings and recommendations as to the eligibility or continued eligibility of an individual for access authorization and/or employment clearance on the record supplemented by additional testimony or briefs as have previously been determined by a Review Examiner(s) as appropriate. When additional testimony is taken by the Hearing Examiner, a written transcript of such testimony shall be made by a person possessing appropriate NRC access authorization and/or employment clearance and, except for portions containing Restricted Data or national security information, or other lawfully withholdable information, a copy of such transcript shall be furnished the individual without cost.

(d) The Review Examiners shall not consider the possible impact of the loss of the individual's services upon the NRC program.

(e) If, after considering all the factors in light of the criteria set forth in this part, a Review Examiner is of the opinion that granting or continuing access authorization and/or employment clearance to the individual will not endanger the common defense and security and will be clearly consistent with the national interest, the Review Examiner shall make a favorable recommendation; otherwise, the Review Examiner shall make an adverse recommendation. Each Review Examiner shall individually prepare a report of his or her findings and recommendations and submit the report in writing to the Executive Director for Operations, who shall furnish a copy to the individual. The findings and recommendations shall be fully supported by stated reasons supporting the findings and recommendations.

[47 FR 38676, Sept. 2, 1982, as amended at 52 FR 31610, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

§ 10.33 Action by the Executive Director for Operations.

(a) The Executive Director for Operations, on the basis of the record accompanied by all findings and recommendations, shall make a final determination whether access authorization and/or employment clearance shall be granted, denied, or revoked, except when the provisions of § 10.28 (i), (j), or (l) have been used and the Executive Director for Operation's determination is adverse, the Commission shall make the final agency determination.

(b) In making the determination as to whether access authorization and/or employment clearance shall be granted, denied, or revoked, the Executive Director for Operations or the

Commission shall give due recognition to the favorable as well as the unfavorable information concerning the individual and shall take into account the value of the individual's services to the NRC's program and the consequences of denying or revoking access authorization and/or employment clearance.

(c) In the event of an adverse determination, the Executive Director for Operations shall promptly notify the individual through the Director, Office of Administration, of his or her decision that access authorization and/or employment clearance is being denied or revoked and of his or her findings with respect to each allegation contained in the notification letter for transmittal to the individual.

(d) In the event of a favorable determination, the Executive Director for Operations shall promptly notify the individual through the Director, Office of Administration.

[47 FR 38676, Sept. 2, 1982, as amended at 52 FR 31610, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

§ 10.34 Action by the Commission.

(a) Whenever, under the provisions of § 10.28(i), (j), or (l) an individual has not been afforded an opportunity to confront and cross-examine witnesses who have furnished information adverse to the individual and an adverse recommendation has been made by the Executive Director for Operations, the Commission shall review the record and determine whether access authorization and/or employment clearance shall be granted, denied, or revoked, based upon the record.

(b) When the Commission determines to deny or revoke access authorization and/or employment clearance, the individual shall promptly be notified through the Director, Office of Administration, of its decision that access authorization and/or employment clearance is being denied or revoked and of its findings and conclusions with respect to each allegation contained in the notification letter for transmittal to the individual.

(c) Nothing contained in these procedures shall be deemed to limit or affect the responsibility and powers of the Commission to deny or revoke access to Restricted Data or national security information if the security of the nation so requires. Such authority may not be delegated and may be exercised when the Commission determines that invocation of the procedures prescribed in this part is inconsistent with the national security. Such determination shall be conclusive.

[47 FR 38676, Sept. 2, 1982, as amended at 52 FR 31610, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

§ 10.35 Reconsideration of cases.

(a) Where, pursuant to the procedures set forth in §§ 10.20 through 10.34, the Executive Director for Operations or the Commission has made a determination granting access authorization and/or employment clearance to an individual, the individual's eligibility for access authorization and/or employment clearance shall be reconsidered only when subsequent to the time of that determination, new derogatory information has been received or the scope or sensitivity of the Restricted Data or national security information to which the individual has or will have access has significantly increased. All new derogatory information, whether resulting from the NRC's reinvestigation program or other sources, will be evaluated relative to an individual's continued eligibility in accordance with the procedures of this part.

(b) Where, pursuant to these procedures, the Commission or Executive Director for Operations has made a determination denying or revoking access authorization and/or employment clearance to an individual, the individual's eligibility for access authorization and/or employment clearance may be reconsidered when there is a bona fide offer of employment and/or a bona fide need for access to Restricted Data or national security information and either material and relevant new evidence is presented, which the individual and his or her representatives are without fault in failing to present before, or there is convincing evidence of reformation or rehabilitation. Requests for reconsideration shall be submitted in writing to the Executive Director for Operations through the Director, Office of Administration. Such requests shall be accompanied by an affidavit setting forth in detail the information referred to above. The Executive Director for Operations shall cause the individual to be notified as to whether his or her eligibility for access authorization and/or employment clearance will be reconsidered and if so, the method by which such reconsideration will be accomplished.

(c) Where access authorization and/or employment clearance has been granted to an individual by the Director, Division of Security, without recourse to the procedures set forth in §§ 10.20 through 10.34, the individual's eligibility for access authorization and/or employment clearance shall be reconsidered only in a case where, subsequent to the granting of the access authorization and/or employment clearance, new derogatory information has been received or the scope or sensitivity of the Restricted Data or national security information, to which the individual has or will have access, has significantly increased. All new derogatory information, whether resulting from the NRC's reinvestigation program or other sources, will be evaluated relative to an individual's continued eligibility in accordance with the procedures of this part.

[47 FR 38676, Sept. 2, 1982, as amended at 52 FR 31610, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

Subpart D—Miscellaneous

§ 10.36 Terminations.

In the event the individual is no longer an applicant for access authorization and/or employment clearance or no longer requires such, the procedures of this part shall be terminated without a final determination as to the individual's eligibility for access authorization and/or employment clearance.

§ 10.37 Attorney representation.

In the event the individual is represented by an attorney or other representative, the individual shall file with the Director, Office of Administration, a document designating such attorney or representative and authorizing such attorney or representative to receive all correspondence, transcripts, and other documents pertaining to the proceeding under this part.

[47 FR 38676, Sept. 2, 1982, as amended at 52 FR 31610, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

§ 10.38 Certifications.

Whenever information is made a part of the record under the exceptions authorized by § 10.28 (i), (j), or (l), the record shall contain certificates evidencing that the required determinations have been made.

PART 11—CRITERIA AND PROCEDURES FOR DETERMINING ELIGIBILITY FOR ACCESS TO OR CONTROL OVER SPECIAL NUCLEAR MATERIAL

GENERAL PROVISIONS

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CRITERIA FOR DETERMINING ELIGIBILITY FOR ACCESS TO, OR CONTROL OVER, SPECIAL NUCLEAR MATERIAL

11.21 Application of the criteria.

AUTHORITY: Sec. 161, 68 Stat. 948, as amended (42 U.S.C. 2201); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841).

Section 11.15(e) also issued under sec. 501, 85 Stat. 290 (31 U.S.C. 483a).

SOURCE: 45 FR 76970, Nov. 21, 1980, unless otherwise noted.

GENERAL PROVISIONS

§ 11.1 Purpose.

This part establishes the requirements for special nuclear material access authorization, and the criteria and procedures for resolving questions concerning the eligibility of individuals to receive special nuclear material access authorization for conduct of certain activities, licensed or otherwise, which involve access to or control over special nuclear material.

§ 11.3 Scope.

(a) The requirements, criteria, and procedures of this part apply to the establishment of and eligibility for special nuclear material access authorization for employees, contractors, consultants of, and applicants for employment with, licensees or contractors of the Nuclear Regulatory Commission where such employment, contract, service, or consultation involves any job falling within the criteria of § 11.11 or § 11.13.

(b) The requirements, criteria, and procedures of this part are in addition to and not in lieu of any requirements, criteria, or procedures for access to or control over classified special nuclear material.

§ 11.5 Policy.

It is the policy of the Nuclear Regulatory Commission to carry out its authority to establish and administer, in a manner consistent with traditional American concepts of justice, a personnel security program in the interests of the common defense and security for the purpose of safeguarding special nuclear material and preventing sabotage which would endanger the public by exposure to radiation. To this end, the Commission has established criteria for determining eligibility for special nuclear material access authorization and will afford affected individuals the opportunity for administrative review of questions concerning their eligibility for special nuclear material access authorization.

§ 11.7 Definitions.

As used in this part:

(a) Terms defined in Parts 10, 25, 50, 70, 72, 73, and 95 of this chapter have the same meaning when used in this part.

(b) *Special nuclear material access authorization* means an administrative determination that an individual (including a contractor or consultant) who is employed by or is an applicant for employment with an affected Commission contractor, licensee of the Commission, or contractor of a licensee of the Commission may work at a job which affords access to or control over special nuclear material and that permitting the individual to work at that job would not be inimical to the common defense and security.

(c) *NRC-'U' special nuclear material access authorization* means an administrative determination based upon a national agency check and a full-field background investigation, normally conducted by the Office of Personnel Management, that an individual in the course of employment is eligible to work at a job falling within the criterion of § 11.11(a)(1) or § 11.13.

(d) *"NRC-'R' special nuclear material access authorization* means an administrative determination based upon a national agency check and credit investigation that an individual in the course of employment is eligible to work at a job falling within the criterion of § 11.11(a)(2).

[45 FR 76970, Nov. 21, 1980, as amended at 46 FR 58282, Dec. 1, 1981; 50 FR 39077, Sept. 27, 1985; 55 FR 11574, Mar. 29, 1990]

§ 11.8 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). OMB has approved the information collection requirements contained in this part under control number 3150-0062.

(b) The approved information collection requirements contained in this part appear in §§ 11.9, 11.11, 11.13, and 11.15.

[49 FR 19624, May 9, 1984]

§ 11.9 Specific exemptions.

The Commission may, upon application of any interested party, grant an exemption from the requirements of this part. Exemptions will be granted only if they are authorized by law and will not constitute an undue risk to the common defense and security. Documentation related to the request, notification and processing of an exemption shall be maintained for three years beyond the period covered by the exemption.

[45 FR 76970, Nov. 21, 1980, as amended at 53 FR 19245, May 27, 1988]

§ 11.10 Maintenance of records.

Each record required by this part must be legible throughout the retention period specified by each Commission regulation. The record may be the original or a reproduced copy or a microform provided that the copy or microform is authenticated by authorized personnel and that the microform is capable of producing a clear copy throughout the required retention period. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records such as letters, drawing, specification, must include all pertinent information such as stamps, initials, and signatures etc. The licensee shall maintain adequate safeguards against tampering with and loss of records.

[53 FR 19245, May 27, 1988]

REQUIREMENTS FOR SPECIAL NUCLEAR MATERIAL ACCESS AUTHORIZATION

§ 11.11 General requirements.

(a) Each licensee who uses, processes, stores, transports, or delivers to a carrier for transport, formula quantities of special nuclear material (as defined in Part 73 of this chapter) subject to the physical protection requirements of §§ 73.20, 73.25, 73.26, 73.45, and 73.46, and each person subject to the general licensing requirements of § 70.20a, shall identify at its facility or plant (excluding all non-power reactor facilities and storage of fuel incident thereto and facilities and plants in which the licensee possesses or uses only irradiated special nuclear material subject to the exemption of § 73.6(b)), describe, and if not already provided, provide to the Commission, by December 26, 1985 by amendment to its security plan:

(1) All jobs in which an individual could steal or divert special nuclear material, or commit sabotage which would endanger the public by exposure to radiation, by working alone or in cooperation with an individual who does not possess an NRC-U special nuclear material access authorization, or by directing or coercing any individual to assist in the theft, diversion, or sabotage. Such jobs include but are not limited to:

(i) All positions in the licensee's security force,

(ii) Management positions with the authority to:

(A) Direct the actions of members of the security force or alter security procedures, or

(B) Direct routine movements of special nuclear material, or

(C) Direct the routine status of vital equipment.

(iii) All jobs which require unescorted access within onsite alarm stations.

(iv) All jobs which require unescorted access [2] to special nuclear material or within vital areas.

(2) All jobs which require unescorted access within protected areas and which do not fall within the criterion of paragraph (a)(1) of this section.

(b) After 365 days following Commission approval of the amended security plan submitted in accordance with paragraph (a) of this section, no individual may be permitted to work at any job determined by the Commission to fall within the criterion of paragraph (a)(1) of this section without an NRC-U special nuclear material access authorization, and no individual may be permitted unescorted access to any protected area at any site subject to this Part without either an NRC-U or NRC-R special nuclear material access authorization. The exceptions to the requirement for an NRC-U and NRC-R special nuclear material access authorization are as follows:

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[2] This does not alter the requirement for methods to observe individuals within material access areas as stated in § 73.46(e)(9) of this chapter.

(1) Exceptions to the requirement for an NRC-U special nuclear material access authorization for an individual to work at a job within the criteria of paragraph (a)(1) are provided for

(i) Any individual employed in such a job on October 28, 1985, who is not yet in receipt of an NRC-U special nuclear material access authorization from the Commission, provided that a complete application has been submitted to and is pending before the NRC for processing for that employee in accordance with § 11.15 (a) and (b); or

(ii) Any individual in possession of an NRC-L or R access authorization or an equivalent active Federal security clearance but not yet in receipt of the NRC-U special nuclear material access authorization, provided that a complete application has been submitted to and is pending before the NRC for processing for that employee in accordance with § 11.15 (a) or (b), or both.

(2) Exceptions to the requirement for an NRC-R special nuclear material access authorization for an individual to have unescorted access to a protected area are provided for

(i) Any individual employed in such a job on October 28, 1985 who is not yet in receipt of an NRC-R special nuclear material access authorization from the Commission, provided that a complete application has been submitted to and is pending before the NRC for processing for that employee in accordance with § 11.15 (a) and (b); or

(ii) Any individual in possession of an NRC-L access authorization or an equivalent active Federal security clearance, provided that a complete application has been submitted to the NRC for processing for that employee in accordance with § 11.15 (a) or (b), or both.

[45 FR 76970, Nov. 21, 1980, as amended at 46 FR 56599, Nov. 18, 1981; 50 FR 39077, Sept. 27, 1985]

§ 11.13 Special requirements for transportation.

(a) All individuals who, after 365 days following approval of the amended security plan submitted in accordance with § 11.11(a), transport, arrange for transport, drive motor vehicles in road shipments of special nuclear material, pilot aircraft in air shipments of special nuclear material, act as monitors at transfer points, or escort road, rail, sea, or air shipments of special nuclear material subject to the appropriate physical protection requirements of §§ 73.20, 73.25, 73.26, or 73.27 of this chapter, or who are authorized to alter the scheduling and routing of such transport shall have NRC-U special nuclear material access authorization. Exceptions are provided for

(1) Any individual who is employed in such a job on October 28, 1985 and who is not yet in receipt of an NRC-U special nuclear material access authorization from the Commission, provided that a complete application has been submitted to and is pending before the NRC for processing for that employee in accordance with § 11.15 (a) and (b) or

(2) Any individual in possession of an NRC-L or R access authorization or equivalent active Federal security clearance but not yet in receipt of the NRC-U special nuclear material access authorization, provided that a complete application has been submitted to and is pending before the NRC for processing for that employee in accordance with § 11.15 (a) or (b), or both.

(b) Each licensee who, 365 days after Commission approval of the amended security plan submitted in accordance with § 11.11(a), transports or delivers to a carrier for transport special nuclear material subject to the physical protection requirement of §§ 73.20, 73.25, 73.26, or 73.27 of this chapter shall confirm and record prior to shipment the name and special nuclear material access authorization number of all individuals identified in paragraph (a) of this section assigned to the shipment. The licensee shall retain this record for three years after the last shipment is made. However, the licensee need not confirm and record the special nuclear material access authorization number in the case of any individual for whom an application has been submitted and is pending before the NRC in accordance with paragraph (a) of this section.

[50 FR 39078, Sept. 27, 1985, as amended at 53 FR 19245, May 27, 1988]

§ 11.15 Application for special nuclear material access authorization.

(a)(1) Application for special nuclear material access authorization, renewal, or change in level shall be filed by the licensee on behalf of the applicant with the Director, Division of Security, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Applications for affected individuals employed on October 28, 1985, shall be submitted within 60 days of notification of Commission approval of the amended security plan.

(2) Licensees who wish to secure NRC-U or NRC-R special nuclear material access authorizations for individuals in possession of an active NRC Q or L access authorization or other security clearance granted by another Federal agency based on an equivalent investigation shall submit a "Security Acknowledgement" (NRC Form 176) and a "Request for Access Authorization" (NRC Form 237). NRC will process these requests by verifying the data on an NRC cleared individual, or by contacting the Federal agency which granted the clearance, requesting certification of the security clearance, and determining the investigative basis and level of the clearance. Licensees may directly request the Federal agency which administered the security clearance, if other than NRC, to certify to the NRC that it has on file an active security clearance for an individual and to specify the investigative basis and level of the clearance.

(b) Applications for special nuclear material access authorization for individuals, other than those qualifying under the provisions of § 11.15(a)(2), must be made on forms supplied by the Commission, including:

(1) Questionnaire for Sensitive Positions (SF-86, Parts 1 and 2);

(2) Two completed standard fingerprint cards (FD-258);

(3) Security Acknowledgement (NRC Form 176);

(4) Other related forms where specified in accompanying instruction (NRC-254); and

(5) A statement by the employer, prospective employer, or contractor identifying the job to be assigned to or assumed by the individual and the level of authorization needed, justified by appropriate reference to the licensee's security plan.

(c)(1) Except as provided in paragraph (c)(2) of this section, NRC-U and R special nuclear material access authorizations shall expire 5 years from the date of issuance. If continued NRC-U and R special nuclear material access authorization is required, an application for renewal must be submitted at least 120 days prior to its expiration date. Failure to make a timely application will result in expiration of special nuclear material access authorization. Special nuclear material access authorization for which a timely application for renewal has been made may be continued beyond the expiration date pending final action on the application. An application for renewal must include:

(i) A statement by the licensee that at the time of application for renewal the individual's assigned or assumed job requires an NRC-U special nuclear material access authorization, justified by appropriate reference to the licensee's security plan;

(ii) Questionnaire for Sensitive Positions (SF-86, Parts 1 and 2);

(iii) Two completed standard fingerprint cards (FD-258); and

(iv) Other related forms where specified in accompanying NRC instructions (NRC Form 254).

(2) An exception to the NRC-U special nuclear material access authorization expiration date and the time for submission of NRC-U special nuclear material access authorization renewal applications is provided for those individuals who have a current and active DOE-Q access authorization and who are subject to DOE Selective Reinvestigation Program requirements. For these individuals, the time for submission of NRC-U special nuclear material access authorization renewal applications may coincide with the time for submission to DOE of the SF-86 pursuant to DOE Selective Reinvestiga-

tion Program requirements. The licensee may submit to NRC, concurrent with its submission to DOE, a copy of the SF-86 which is dated and bears an original signature together with the forms and information required by paragraphs (c)(1) (i), (iii) and (iv) of this section, as the supporting documentation for an NRC-U special nuclear material access authorization renewal application. Any NRC-U special nuclear material access authorization issued in response to a renewal application submitted pursuant to this paragraph will not expire until the date set by DOE for the next reinvestigation of the individual pursuant to DOE's Selective Reinvestigation Program (generally every five years). At that time (and at the time of each subsequent reinvestigation of the individual), the licensee may again submit, concurrent with its submission to DOE, a copy of the SF-86 which is dated and bears an original signature together with the forms and information required by paragraphs (c)(1) (i), (iii), and (iv) of this section as the supporting documentation for the renewal application. Failure to file such a renewal application concurrent with the time for submission of an individual's SF-86 to DOE pursuant to DOE Selective Reinvestigation Program requirements will result in the expiration of the individual's NRC special nuclear material access authorization. NRC-U special nuclear material access authorizations for which timely applications for renewal have been made may be continued beyond the expiration date, pending final action on the application.

(3) Notwithstanding the above, in no instance shall the period of time for the initial and each subsequent NRC-U renewal application to NRC exceed 7 years. Any individual who is subject to the DOE Selective Reinvestigation Program requirements but, for administrative or other reasons, who does not submit reinvestigation forms to DOE within 7 years of the previous submission, shall submit a renewal application to NRC using the forms prescribed in paragraph (c)(1) above before the expiration of the 7 year period. Failure to request an NRC-U renewal for any individual within the 7 year period will result in termination of the individual's NRC-U access authorization.

(d) If at any time, due to new assignment or assumption of duties, a change in special nuclear material access authorization level from NRC "R" to "U" is required, the individual shall apply for a change of level of special nuclear material access authorization. The application must include a description of the new duties to be assigned or assumed, justified by appropriate reference to the licensee's security plan.

(e)(1) Each application for special nuclear material access authorization, renewal, or change in level must be accompanied by the licensee's remittance, payable to the U.S. Nuclear Regulatory Commission, according to the following schedule:

i. NRC-U requiring full field investigation	$2,415
ii. NRC-U requiring full field investigation (expedited processing)	2,932
iii. NRC-U based on certification of comparable full field background investigation	[1] 0
iv. NRC-U or R renewal	[2] 40
v. NRC-R	[2] 40
vi. NRC-R based on certification of comparable investigation	[2] 0

[1] If the NRC determines, based on its review of available data, that a full field investigation is necessary, a fee of $2,415 will be assessed prior to the conduct of the investigation.

[2] If the NRC determines, based on its review of available data, that a national agency check and credit investigation is necessary, a fee of $40.00 will be assessed prior to the conduct of the investigation; however, if a full field investigation is deemed necessary by the NRC, based on its review of available data, a fee of $2,415 will be assessed prior to the conduct of the investigation.

(2) Material access authorization fees will be published each time the Office of Personnel Management notifies NRC of a change in the background investigation rate it charges NRC for conducting the investigation. Any such changed access authorization fees will be applicable to each access authorization request received upon or after the date of publication. Applications from individuals having current Federal access authorizations may be processed expeditiously at no

st, since the Commission may accept
e certification of access authoriza-
ns and investigative data from
her Federal government agencies
ich grant personnel access authori-
tions.

(f)(1) Any Federal employee, em-
oyee of a contractor of a Federal
ency, licensee, or other person visit-
g an affected facility for the purpose
conducting official business, who
ssesses an active NRC or DOE-Q
cess authorization or an equivalent
ederal security clearance granted by
other Federal agency ("Top
ecret") based on a comparable full
eld background investigation may be
ermitted, in accordance with § 11.11,
e same level of unescorted access
at an NRC-U special nuclear materi-
access authorization would afford.

(2) Any Federal employee, employee
a contractor of a Federal agency, li-
ensee, or other person visiting an af-
ected facility for the purpose of con-
ucting official business, who possess-
s an active NRC or DOE-L access au-
horization or an equivalent security
learance granted by another Federal
gency ("Secret") based on a back-
round investigation or national
gency check and credit investigation
ay be permitted, in accordance with
11.11, the same level of unescorted
ccess that an NRC-R special nuclear
aterial access authorization would
fford. An NRC or DOE-L access au-
horization or an equivalent security
learance ("Secret"), based on a back-
ground investigation or national
gency check, which was granted or
eing processed by another Federal
gency prior to April 30, 1990 is ac-
eptable to meet this requirement.

50 FR 39078, Sept. 27, 1985, as amended at
4 FR 40060, Oct. 4, 1989; 55 11574, Mar. 29,
190; 55 FR 14379, Apr. 17, 1990]

11.16 Cancellation of request for special nuclear material access authorization.

When a request for an individual's
access authorization is withdrawn or
cancelled, the licensee shall notify the
Chief, Personnel Security Branch,
NRC Division of Security immediately,
by telephone, so that the full field in-
vestigation or national agency check
and credit investigation may be discontinued. The caller shall provide the full name and date of birth of the individual, the date of request, and the type of access authorization originally requested ("U" or "R"). The licensee shall promptly submit written confirmation of the telephone notification to the Personnel Security Branch, NRC Division of Security. A portion of the fee for the "U" special nuclear material access authorization may be refunded depending upon the status of the full field investigation at the time of withdrawal or cancellation.

[55 FR 11574, Mar. 29, 1990, as amended at 55 FR 14379, Apr. 17, 1990]

CRITERIA FOR DETERMINING ELIGIBILITY FOR ACCESS TO, OR CONTROL OVER, SPECIAL NUCLEAR MATERIAL

§ 11.21 Application of the criteria.

(a) The decision to grant or deny special nuclear material access authorization is a comprehensive, commonsense judgment, made after consideration of all the relevant information, favorable or unfavorable, that to grant or deny special nuclear material access authorization is or is not inimical to the common defense and security and is or is not clearly consistent with the national interest.

(b) To assist in making these determinations, on the basis of all the information in a particular case, there are set forth in § 10.11 of this chapter a number of specific types of derogatory information. These criteria are not exhaustive but contain the principal types of derogatory information which in the opinion of the Commission create a question as to the individual's eligibility for special nuclear material access authorization. These criteria are subject to continuing review and may be revised from time to time as experience and circumstances may make desirable.

(c) When the reports of investigation of an individual contain information reasonably falling within one or more of the classes of derogatory information listed in § 10.11, it shall create a question as to the individual's eligibility for special nuclear material access authorization. In such cases, the application of the criteria shall be made in light of and with specific regard to whether the existence of such information supports a reasonable belief that the granting of a special nuclear material access authorization would be inimical to the common defense and security. The Director, Division of Security, may authorize the granting of special nuclear material access authorization on the basis of the information in the case or may authorize the conduct of an interview with the individual and, on the basis of such interview and such other investigation as the Director deems appropriate, may authorize the granting of special nuclear material access authorization. Otherwise, a question concerning the eligibility of an individual for special nuclear material access authorization shall be resolved in accordance with the procedures set forth in §§ 10.20 through 10.38 of this chapter.

(d) In resolving a question concerning the eligibility or continued eligibility of an individual for special nuclear material access authorization by action of the Hearing Examiner,[4] the following principle shall be applied by the Examiner: Where there are grounds sufficient to establish a reasonable belief as to the truth of the information regarded as substantially derogatory and when the existence of such information supports a reasonable belief that granting access would be inimical to the common defense and security, this shall be the basis for a recommendation for denying or revoking special nuclear material access authorization if not satisfactorily rebutted by the individual or shown to be mitigated by circumstance.

[45 FR 76970, Nov. 21, 1980, as amended at 47 FR 38683, Sept. 2, 1982]

PART 14—ADMINISTRATIVE CLAIMS UNDER FEDERAL TORT CLAIMS ACT

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14.57 Suit against the United States exclusive remedy.

AUTHORITY: Sec. 1, 80 Stat. 306 (28 U.S.C. 2672); sec. 2679, 62 Stat. 984 as amended (28 U.S.C. 2679); sec. 161, 68 Stat. 948 as amended (42 U.S.C. 2201); 28 CFR 14.11.

SOURCE: 47 FR 8983, Mar. 3, 1982, unless otherwise noted.

Subpart A—General

§ 14.1 Scope of regulations.

(a) The terms "Nuclear Regulatory Commission' and "NRC" as used in this part mean the agency established by section 201(a) of the Energy Reorganization Act of 1974, but do not include any contractor with the Nuclear Regulatory Commission.

(b) The regulations in this part supplement the Department of Justice's regulations in 28 CFR Parts 14 and 15.

(c) These regulations apply to administrative claims under the Federal Tort Claims Act, as amended, asserted on or after the effective date of this rule, for money damages against the United States for damage to or loss of property or personal injury or death

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[4] The function of the Hearing Examiner is described in Part 10 of this chapter.

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caused by the negligent or wrongful act or omission of any employee of the NRC while acting within the scope of his or her office or employment, under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred.

(d) These regulations also set forth the procedures when lawsuits are commenced against an employee of the NRC resulting from the operation of a motor vehicle while acting within the scope of his or her employment.

§ 14.3 Limit on attorney fees; penalty.

(a) An attorney may not charge or receive fees in excess of:

(1) 25 percent of any judgment rendered under 28 U.S.C. 1346(b);

(2) 25 percent of any settlement made under 28 U.S.C. 2677; or

(3) 20 percent of any award, compromise, or settlement made under 28 U.S.C. 2672.

(b) Any attorney who charges or receives any amount in excess of that allowed under this section is subject to a fine of not more than $2,000 or imprisonment for not more than one year, or both. (28 U.S.C. 2678)

Subpart B—Filing Procedures and Requirements

§ 14.11 Who may file a claim.

(a) A claim for damage to or loss of property may be presented by the owner of the property interest which is the subject of the claim, his or her duly authorized agent, or his or her legal representative.

(b) A claim for personal injury may be presented by the injured person, his or her duly authorized agent, or his or her legal representative.

(c) A claim based on death may be presented by the executor or administrator of the decedent's estate, or by any other person legally entitled to assert the claim under applicable State law.

(d) A claim for loss wholly compensated by an insurer with the rights of a subrogee may be presented by the insurer. A claim for loss partially compensated by an insurer with the rights of a subrogee may be presented by the insurer or the insured individually, to the extent of their respective interests, or jointly. Whenever an insurer presents a claim asserting the rights of a subrogee, the insurer shall present with the claim appropriate evidence that the insurer has the rights of a subrogee.

(e) If a claim is presented by an agent or legal representative that person shall:

(1) Present the claim in the name of the claimant;

(2) Sign the claim;

(3) Show the title or legal capacity of the person signing the claim; and

(4) Include with the claim evidence of his or her authority to present a claim on behalf of the claimant as agent, executor, administrator, parent, guardian, or other representative.

§ 14.13 When is a claim presented to NRC.

For purposes of the provisions of 28 U.S.C. 2672, a claim is presented when NRC receives from a claimant, or the claimant's duly authorized agent or legal representative, an executed Standard Form 95 or other written notification of an incident. An executed Standard Form 95 or written notification must be accompanied by a claim for money damages in a sum certain for damage to or loss of property, personal injury, or death alleged to have occurred by reason of the incident.

§ 14.15 Where to present a claim to NRC.

A claimant shall mail or deliver the claim to the office of employment of the NRC employee whose negligent or wrongful act or omission is alleged to have caused the loss or injury. If the office of employment is not known, the claimant shall file the claim with the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

[47 FR 8983, Mar. 3, 1982, as amended at 51 FR 35999, Oct. 8, 1986]

§ 14.17 A claim must be presented to the appropriate agency.

A claimant shall present the claim to the Federal agency whose activities gave rise to the claim. If a claim is erroneously presented to the NRC, the NRC shall transfer it to the appropriate agency, if the proper agency can be identified from the claim, and shall advise the claimant of the transfer. If transfer is not feasible, the NRC shall return the claim to the claimant. The fact of transfer does not, in itself, preclude further transfer, return of the claim to the claimant, or other appropriate disposition of the claim. A claim shall be presented, as required by 28 U.S.C. 2401(b), as of the date it is received by the appropriate agency.

§ 14.19 When a claim is filed with more than one agency.

(a) If the NRC and one or more other Federal agencies is or may be involved in the events giving rise to the claim, and if the claim is filed with the NRC, the NRC shall contact all other affected agencies in order to designate the single agency which will investigate and decide the merits of the claim.

(1) In the event that an agreed upon designation cannot be made by the affected agencies, the Department of Justice will be consulted and will designate a primary agency to investigate and decide the merits of the claim. If the NRC is designated as the primary agency, it shall notify the claimant that all future correspondence concerning the claim shall be directed to the NRC.

(2) All involved Federal agencies can agree either to conduct their own administrative reviews and to coordinate the results or to have the investigations conducted by the primary agency. In either event, the primary agency is responsible for the final determination of the claim.

(b) A claimant presenting a claim arising from an incident to more than one agency should identify each agency to which the claim is submitted at the time each claim is presented. If a claim arising from an incident is presented to more than one Federal agency without any indication that more than one agency is involved, and any one of the concerned Federal agencies takes final action on that claim, the final action is conclusive on the claims presented to the other agencies in regard to the time required for filing suit set forth in 28 U.S.C. 2401(b). However, if NRC, as a subsequently involved Federal agency, desires to take further action with a view towards settling the claim, the NRC may treat the matter as a request for reconsideration of the final denial under 10 CFR 14.39, unless suit has been filed in the interim, and advises the claimant of the action.

§ 14.21 Filing a claim after an agency final denial.

If, after a final denial by another agency, the claimant files with the NRC a claim arising out of the same incident on which the claim filed with the other agency was based, the submission of the claim to NRC will not toll the requirement of 28 U.S.C. 2401(b) that suit must be filed within six months of the final denial by the other agency, unless the other agency specifically and explicitly treats the submission to NRC as a request for reconsideration under 10 CFR 14.39 and advises the claimant of the action.

§ 14.23 Evidence and information to be submitted.

(a) *Death.* In support of a claim based on death, the claimant may be required to submit the following evidence or information:

(1) An authenticated death certificate or other competent evidence showing cause of death, date of death, and age of decedent.

(2) Decedent's employment or occupation at time of death, including his or her monthly or yearly salary or earnings (if any), and the duration of his or her last employment or occupation.

(3) Full names, addresses, birth dates, kinship, and marital status of the decedent's survivors, including identification of those survivors who were dependent for support upon the decedent at the time of death.

(4) Degree of support afforded by the decedent to each survivor dependent upon him or her for support at the time of death.

(5) Decedent's general physical and mental condition before death.

(6) Itemized bills for medical and burial expenses incurred by reason of the incident causing death, or itemized

receipts of payment for these expenses.

(7) If damages for pain and suffering prior to death are claimed, a physician's detailed statement specifying the injuries suffered, duration of pain and suffering, any drugs administered for pain, and the decedent's physical condition in the interval between injury and death.

(8) Any other evidence or information which may have a bearing on either the responsibility of the United States for the death or the amount of damages claimed.

(b) *Personal injury.* In support of a claim for personal injury, including pain and suffering, the claimant may be required to submit the following evidence or information:

(1) A written report by the attending physician or dentist setting forth the nature and extent of the injury, nature and extent of treatment, any degree of temporary or permanent disability and prognosis, period of hospitalization, and any diminished earning capacity. In addition, the claimant may be required to submit to a physical or mental examination by a physician employed by the NRC or another Federal agency. The claimant may request in writing a copy of the report of the examining physician if the claimant has:

(i) Furnished the report referred to in paragraph (a)(1) of this section on request; and

(ii) Made or agrees to make available to the NRC all other reports of the claimant's physical or mental condition which have been or are made by any physician.

(2) Itemized bills for medical, dental, and hospital expenses incurred, or itemized receipts of payment for these expenses.

(3) If the prognosis reveals the necessity for future treatment, a statement of expected expenses for the treatment.

(4) If a claim is made for loss of time from employment, a written statement from his or her employer showing actual time lost from employment, whether he or she is a full- or part-time employee, and wages or salary actually lost.

(5) If a claim is made for loss of income and the claimant is self-employed, documentary evidence showing the amount of earnings actually lost.

(6) Any other evidence or information which may have a bearing on either the responsibility of the United States for the personal injury or the damages claimed.

(c) *Property damage.* In support of a claim for damage to or loss of property, real or personal, the claimant may be required to submit the following evidence or information:

(1) Proof of ownership of the property interest which is the subject of the claim.

(2) A detailed statement of the amount claimed with respect to each item of property.

(3) An itemized receipt of payment for necessary repairs or itemized written estimates of the cost of these repairs.

(4) A statement listing date of purchase, purchase price, and salvage value, where repair is not economical.

(5) Any other evidence or information which may have a bearing on either the responsibility of the United States for the injury to or loss of property or the damages claimed.

§ 14.25 Amending a claim.

The claimant may amend a claim presented in compliance with 10 CFR 14.13 at any time prior to final agency action or prior to the exercise of the claimant's option under 28 U.S.C. 2675(a). The claimant or his or her duly authorized agent or legal representative shall sign each amendment and submit it in writing. Upon the timely filing of an amendment to a pending claim, the agency shall have six months in which to make a final disposition of the claim as amended and the claimant's option under 28 U.S.C. 2675(a) does not accrue until six months after the filing of an amendment.

§ 14.27 Time limit.

The claimant shall furnish evidence and information of the types described in 10 CFR 14.23, to the extent reasonably practicable, when the claim is initially presented. If the claimant fails to furnish sufficient evidence and information within six months after the claim was initially presented to enable NRC to adjust, determine, compromise and settle the claim, NRC may consider the claim a nullity.

Subpart C—Commission Action and Authority

§ 14.31 Investigation.

The NRC may:

(a) Require the claimant to furnish any evidence or information which is relevant to its consideration of the claim;

(b) Examine the claimant; or

(c) Investigate, or request any other Federal agency to investigate, a claim filed under this part.

§ 14.33 Officials authorized to act.

The General Counsel or the General Counsel's designee shall exercise the authority to adjust, determine, compromise and settle a claim under the provisions of 28 U.S.C. 2672.

[51 FR 35999, Oct. 8, 1986]

§ 14.35 Limitation on NRC's authority.

(a) The NRC shall effect an award, compromise, or settlement of a claim hereunder in excess of $25,000 only with the prior written approval of the Attorney General or his designee. For the purposes of this paragraph, a principal claim and any derivative or subrogated claim are treated as a single claim.

(b) The NRC may adjust, determine, compromise, or settle a claim under this part only after consultation with the Department of Justice if, in the opinion of the Office of the General Counsel:

(1) A new precedent or a new point of law is involved;

(2) A question of policy is or may be involved;

(3) The United States is or may be entitled to indemnity or contribution from a third party and the NRC is unable to adjust the third party claim, or

(4) The compromise of a particular claim, as a practical matter, will or may control the disposition of a related claim in which the amount to be paid may exceed $25,000.

(c) The NRC may adjust, determine, compromise, or settle a claim under this part only after consultation with the Department of Justice if the NRC is informed or is otherwise aware that the United States, or an employee, agent, or cost-plus contractor of the United States, is involved in litigation based on a claim arising out of the same incident or transaction.

(d) When Department of Justice approval or consultation is required under this section or the advice of the Department of Justice is otherwise requested, the NRC shall direct the referral or request to the Assistant Attorney General, Civil Division, Department of Justice, in writing. The NRC shall ensure that the referral or request contains:

(1) A short and concise statement of the facts and the reasons for the referral or request;

(2) Copies of relevant portions of NRC's claim file; and

(3) A statement of the recommendations or views of the NRC.

A referral or request to the Department of Justice may be made at any time after presentment of a claim to the NRC.

[47 FR 8983, Mar. 3, 1982, as amended at 51 FR 51 FR 35999, Oct. 8, 1986]

§ 14.37 Final denial of claim.

The NRC shall send notice of a final denial of a claim in writing to the claimant, his or her attorney or legal representative, by certified or registered mail. The notification of final denial may include a statement of the reasons for the denial. The NRC shall include a statement in the notification of final denial that, if the claimant is dissatisfied with NRC's action, he or she may file suit in an appropriate U.S. District Court not later than 6 months after the date of mailing of the notification.

§ 14.39 Reconsideration of a claim.

Prior to the commencement of suit and prior to the expiration of the 6-month period provided in 28 U.S.C. 2401(b), a claimant, or his or her duly authorized agent, or legal representative, may file a written request with the NRC for reconsideration of a final denial of a claim. Upon the timely filing of a request for reconsideration, the NRC shall have 6 months from the date of filing in which to make a final disposition of the claim, and the claimant's option under 28 U.S.C. 2675(a) does not accrue until 6 months after the filing of a request for reconsideration. Final NRC action on a request for reconsideration shall be effected in accordance with the provisions of 10 CFR 14.37.

§ 14.41 Payment of approved claims.

(a) The NRC shall pay any award, compromise, or settlement in an amount of $2,500 or less made under the provisions of 28 U.S.C. 2672 out of the appropriations available to it. The NRC shall obtain payment of any award, compromise, or settlement in excess of $2,500 from the Department of the Treasury by forwarding Standard Form 1145 to the Payment Branch, Claims Group, General Accounting Office. If an award, compromise, or settlement is in excess of $25,000, Standard Form 1145 must be accompanied by evidence that the award, compromise, or settlement has been approved by the Attorney General or the Attorney General's designee. When the use of Standard Form 1145 is required, it must be executed by the claimant or it must be accompanied by either a claims settlement agreement or a Standard Form 95 executed by the claimant.

(b) If a claimant is represented by an attorney, the voucher for payment must designate both the claimant and his or her attorney as payees, and the check must be delivered to the attorney whose address appears on the voucher.

§ 14.43 Acceptance of payment constitutes release.

Acceptance by the claimant, his agent, or legal representative, of any award, compromise, or settlement made under the provisions of 28 U.S.C. 2672 or 2677, is final and conclusive on the claimant, his or her agent or legal representative and any other person on whose behalf or for whose benefit the claim has been presented. Acceptance constitutes a complete release of any claim against the United States and against any employee of the Government whose act or omission gave rise to the claim.

Subpart D—Employee Drivers

§ 14.51 Procedures when employee drivers are sued.

(a) Any NRC employee against whom a civil action or proceeding is brought for damage to property, or for personal injury or death, on account of the employee's operation of a motor vehicle in the scope of his or her office or employment with the NRC, shall promptly deliver all process and pleadings served upon the employee, or an attested true copy, to the Office of the General Counsel. If the action is brought against an employee's estate, this procedure applies to the employee's personal representative.

(b) In addition, upon the employee's receipt of any process or pleadings, or any prior information regarding the commencement of a civil action or proceeding, the employee shall immediately advise the Office of the General Counsel by telephone or telegraph.

[47 FR 8983, Mar. 3, 1982, as amended at 51 FR 35999, Oct. 8, 1986]

§ 14.53 Scope of employment report.

A report containing all data bearing upon the question whether the employee was acting within the scope of his or her office or employment will be furnished by the General Counsel or designee to the United States Attorney for the district encompassing the place where the civil action or proceeding is brought. A copy of the report also will be furnished to the Director of the Torts Branch, Civil Division, Department of Justice, at the earliest possible date, or within the time specified by the United States Attorney.

[51 FR 35999, Oct. 8, 1986]

§ 14.55 Removal of State court proceedings.

Upon a certification by the United States Attorney that the defendant employee was acting within the scope of his or her office or employment at the time of the incident out of which the suit arose, any civil action or proceeding commenced in a State court may be removed to the district court of the United States for the district and division encompassing the place where the action or proceeding is pending in accordance with 28 U.S.C. 2679.

§ 14.57 Suit against United States exclusive remedy.

The remedy against the United States provided by 28 U.S.C. 1346(b) and 2672 for damage to or loss of property or personal injury or death, resulting from the operation by an employee of the Government of any motor vehicle while acting within the scope of his or her office or employment, is exclusive of any other civil action or proceeding by reason of the same subject matter against the employee or his or her estate whose act or omission gave rise to the claim.

PART 15—DEBT COLLECTION PROCEDURES

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AUTHORITY: Secs. 161, 186, 68 Stat. 948, 955, as amended (42 U.S.C. 2201, 2236); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841); sec. 3, Pub. L. 89-508, 80 Stat. 308, as amended (31 U.S.C. 3711, 3717, 3718); sec. 1, Pub. L. 97-258, 96 Stat. 972 (31 U.S.C. 3713); sec. 5, Pub. L. 89-508, 80 Stat. 308, as amended (31 U.S.C. 3716); Pub. L. 97-365, 96 Stat. 1749 (31 U.S.C. 3701-3719); Federal Claims Collection Standards, 4 CFR parts 101-105.

SOURCE: 47 FR 7616, Feb. 22, 1982, unless otherwise noted.

Subpart A—Application and Coverage

§ 15.1 Application.

(a) This part applies to claims for the payment of debts owed to the United States Government in the form of money or property and; unless a different procedure is specified in a statute, regulation, or contract; prescribes procedures by which the NRC—

(1) Collects, compromises, suspends, and terminates collection actions for claims;

(2) Determines and collects interest and other charges on these claims; and

(3) Refers unpaid claims to the General Accounting Office (GAO) and the

Department of Justice (DOJ) for litigation.

(b) The following are examples of kinds of debts to which special statutory and administrative procedures apply:

(1) A claim against an employee for erroneous payment of pay and allowances subject to waiver under 5 U.S.C. 5584.

(2) A claim against an applicant for, or a holder or former holder of, an NRC license involving the payment of civil penalties imposed by the NRC under 10 CFR 2.205.

(3) A claim involved in a case pending before any Federal Contract Appeals Board or Grant Appeals Board. However, nothing in this part prevents negotiation and settlement of a claim pending before a Board.

[47 FR 7616, Feb. 22, 1982, as amended at 55 FR 32377, Aug. 9, 1990]

§ 15.2 Definitions.

Administrative offset means withholding money payable by the United States Government to, or held by the Government for, a person to satisfy a debt the person owes the United States Government.

Claim and *debt* are used synonymously and interchangeably for the purposes of this part. These terms refer to money or property which has been determined by an appropriate NRC official to be owed to the United States by any person, organization, or entity, except another Federal agency.

Delinquent. A debt is considered delinquent if it has not been paid by the date specified in the initial written demand for payment or applicable contractual agreement with the NRC unless other satisfactory payment arrangements have been made by that date. If the debtor fails to satisfy obligations under a payment agreement with the NRC after other payment arrangements have been made, the debt becomes a delinquent debt.

License means any license, permit, or other approval issued by the Commission.

Payment in full means payment of the total debt due the United States, including any interest, penalty, and administrative costs of collection assessed against the debtor.

[55 FR 32377, Aug. 9, 1990]

§ 15.3 Communications.

Unless otherwise specified, all communications concerning the regulations in this part should be addressed to the Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555, ATTN: Docketing and Service Branch. Communications may be delivered in person to the Commission's offices located at 11555 Rockville Pike, One White Flint North, Rockville, Maryland 20852.

[55 FR 32377, Aug. 9, 1990]

§ 15.5 Claims that are covered.

(a) These procedures generally apply to any claim for payment of a debt which:

(1) Results from activities of the NRC, including fees imposed under part 170 and part 171; or

(2) Is referred to the NRC for collection.

(b) These procedures do not apply to:

(1) A claim based on a civil monetary penalty for violation of a licensing requirement unless § 2.205 of this chapter provides otherwise;

(2) A claim as to which there is an indication of fraud, the presentation of a false claim, or misrepresentation on the part of the debtor or any other party having an interest in the claim;

(3) A claim based in whole or in part on conduct in violation of the antitrust laws;

(4) A tax claim, as to which differing exemptions, administrative considerations, enforcement considerations, and statutes apply.

(5) A claim between Federal agencies; and

(6) A claim once it becomes subject to salary offset which is governed by 5 U.S.C. 5514

[47 FR 7616, Feb. 22, 1982, as amended at 55 FR 32377, Aug. 9, 1990]

§ 15.7 Monetary limitation on NRC's authority.

The NRC's authority to compromise a claim, or to terminate or suspend collection action on a claim covered by these procedures, is limited by 31 U.S.C. 3711(a) to claims that—

(a) Have not been referred to another Federal Agency, including the GAO, for further collection action; and

(b) Do not exceed $20,000, exclusive of interest, penalties, and administrative costs (the monetary limitation).

[47 FR 7616, Feb. 22, 1982, as amended at 55 FR 32378, Aug. 9, 1990]

§ 15.9 Omissions not a defense.

(a) The failure of the NRC to include in this part any provision of the Federal Claims Collection Standards, 4 CFR parts 101-105, does not prevent the NRC from applying these provisions.

(b) A debtor may not use the failure of the NRC to comply with any provision of this part or of the Federal Claims Collections Standards as a defense.

[47 FR 7616, Feb. 22, 1982, as amended at 55 FR 32378, Aug. 9, 1990]

§ 15.11 Conversion claims.

These procedures are directed primarily to the recovery of money on behalf of the Government. The NRC may demand:

(a) The return of specific property; or

(b) Either the return of property or the payment of its value.

§ 15.13 Subdivision of claims.

The NRC shall consider a debtor's liability arising from a particular transaction or contract as a single claim in determining whether the claim is less than the monetary limitation for the purpose of compromising or suspending or terminating collection action. A claim may not be subdivided to avoid the monetary limitation established by 31 U.S.C. 3711(a)(2) and § 15.7.

[55 FR 32378, Aug. 9, 1990]

Subpart B—Administrative Collection of Claims

§ 15.21 Written demands for payment.

(a) The NRC shall make appropriate written demands upon the debtor for payment of money or the return of specific property in terms which spec fy:

(1) The basis of the indebtednes and the right of the debtor to see review within the NRC;

(2) The amount claimed;

(3) A description of any propert which is to be returned by a date certain;

(4) The date on which payment is to be made (which is normally the date the initial written demand letter statement was mailed or hand delivered, unless otherwise specified by contractual agreement, established by Federal statute or regulation, or agreed to under a payment agreement);

(5) The applicable standards for assessing interest, penalties, and administrative costs under 4 CFR 102.13;

(6) The applicable policy for reporting the delinquent debt to consumer reporting agencies.

(b) Unless a debtor is a current NRC employee, the NRC shall normally send three progressively stronger written demands at not more than 30-day intervals, unless circumstances indicate that alternative remedies better protect the Government's interest, that the debtor has explicitly refused to pay, or that sending a further demand is futile. Depending upon the circumstances of the particular case, the second and third demands may—

(1) Offer or seek to confer with the debtor;

(2) State the amount of the interest and penalties that will be added on a daily basis as well as the administrative costs that will be added to the debt until the debt is paid; and

(3) State that the authorized collection procedures include any procedure authorized in this part including:

(i) Contacts with the debtor's employer when the debtor is employed by the Federal Government or is a member of the military establishment or the Coast Guard;

(ii) Possible referral of the debt to a private agency for collection;

(iii) Possible reporting of the delinquent debt to consumer reporting agencies in accordance with the guidance and standards contained in 4 CFR 102.5 and the NRC procedures set forth in § 15.26;

(iv) The suspension or revocation of a license or other remedy under § 15.29;

(v) Installment payments possibly requiring security; and

(vi) The right to refer the claim to the GAO or the DOJ for litigation.

(c) The NRC shall normally send only one written demand to a debtor who is a current NRC employee. The NRC follows the procedures described in § 15.33 if full payment is not received by the due date specified in the written demand. If the NRC cannot obtain full payment by following the procedures described in § 15.33, the NRC may follow other collection procedures described in this subpart.

(d) The failure to state in a letter of demand a matter described in § 15.21 is not a defense for a debtor and does not prevent the NRC from proceeding with respect to that matter.

[47 FR 7616, Feb. 22, 1982, as amended at 55 FR 32378, Aug. 9, 1990]

§ 15.23 Telephone inquiries and investigations.

(a) If a debtor has not responded to one or more written demands, the NRC shall make reasonable efforts by telephone to determine the debtor's intentions. If the debtor cannot be reached by telephone at the debtor's place of employment, the NRC may telephone the debtor at his or her residence between 7:00 a.m. and 10:00 p.m.

(b) The NRC may undertake an investigation to locate a debtor if the whereabouts of a debtor is a problem, or if a debtor cannot be contacted by telephone.

(c) The NRC, under 15 U.S.C. 1681(f), may obtain consumer credit information from private firms, including the name, address, former addresses, place of employment, and former places of employment of a debtor.

§ 15.25 Personal interviews.

(a) The NRC may seek an interview with the debtor at the offices of the NRC when—

(1) A matter involved in the claim needs clarification;

(2) Information is needed concerning the debtor's circumstances; or

(3) An agreement for payment might be negotiated.

(b) The NRC shall grant an interview with a debtor upon the debtor's request. The NRC will not reimburse a debtor's interview expenses.

[47 FR 7616, Feb. 22, 1982, as amended at 55 FR 32378, Aug. 9, 1990]

§ 15.26 Use of consumer reporting agencies.

(a) In addition to assessing interest, penalties, and administrative costs under § 15.37, the NRC may report a debt that has been delinquent for 90 days to a consumer reporting agency if all the conditions of this paragraph are met.

(1) The debtor has not—

(i) Paid or agreed to pay the debt under a written payment plan that has been signed by the debtor and agreed to by the NRC; or

(ii) Filed for review of the debt under § 15.26 (a)(2)(iv).

(2) The NRC has included a notification in the third written demand (see § 15.21(b)) to the individual debtor stating—

(i) That the payment of the debt is delinquent;

(ii) That, within not less than 60 days after the date of the notification, the NRC intends to disclose to a consumer reporting agency that the individual debtor is responsible for the debt;

(iii) The specific information to be disclosed to the consumer reporting agency; and

(iv) That the debtor has a right to a complete explanation of the debt (if that has not already been given), to dispute information in NRC records about the debt, and to request reconsideration of the debt by administrative appeal or review of the debt.

(3) The NRC has sent at least one written demand by either registered or certified mail with the notification described in paragraph (a)(2) of this section.

(4) The NRC has reconsidered its initial decision on the debt when the debtor has requested a review under § 15.26(a)(2)(iv).

(5) The NRC has taken reasonable action to locate a debtor for whom the

NRC does not have a current address to send the notification provided for in paragraph (a)(2) of this section.

(b) If there is a substantial change in the condition or amount of the debt, the NRC shall—

(1) Promptly disclose that fact(s) to each consumer reporting agency to which the original disclosure was made;

(2) Promptly verify or correct information about a debt on request of a consumer reporting agency for verification of information disclosed by the NRC; and,

(3) Obtain assurances from the consumer reporting agency that the agency is complying with all applicable Federal, state and local laws relating to its use of consumer credit information.

(c) The information the NRC discloses to the consumer reporting agency is limited to—

(1) Information necessary to establish the identity of the individual debtor, including name, address, and taxpayer identification number;

(2) The amount, status, and history of the debt; and

(3) The NRC activity under which the debt arose.

[55 FR 32378, Aug. 9, 1990]

§ 15.27 Contact with debtor's employing agency.

If a debtor is employed by the Federal government or is a member of the military establishment or the Coast Guard, and collection by offset cannot be accomplished in accordance with 5 U.S.C. 5514, the NRC shall contact the employing agency to arrange with the debtor for payment of the indebtedness by allotment or otherwise.

§ 15.29 Suspension or revocation of license.

The NRC may suspend or revoke any license or approval which the NRC has granted to the debtor for any inexcusable, prolonged, or repeated failure of the debtor to pay a delinquent debt. Before suspending or revoking any license or approval for failure to pay a debt, the NRC shall issue to the debtor an Order to Show Cause (by either registered or certified mail) why the license or other privilege should not be suspended or revoked. The NRC shall allow the debtor no more than 30 days to pay the debt in full, including applicable interest, penalties, and administrative costs of collection of the delinquent debt. The NRC may suspend or revoke the license or approval at the end of this period. If a license is revoked under authority of this part, a new application, with appropriate fees, must be made to the NRC. The NRC may not consider an application unless all previous delinquent debts of the debtor to the NRC have been paid in full.

[55 FR 32378, Aug. 9, 1990]

§ 15.31 Disputed debts.

(a) A debtor who disputes a debt shall explain why the debt is incorrect in fact or in law within 30 days from the date that the initial demand letter was mailed or hand-delivered. The debtor may support the explanation by affidavits, cancelled checks, or other relevant evidence.

(b) If the debtor's arguments appear to have merit, the NRC may extend the interest waiver period as described in § 15.37 (j) pending a final determination of the existence or amount of the debt.

(c) The NRC may investigate the facts involved in the dispute and, if it considers it necessary, arrange for a conference at which the debtor may present evidence and any arguments in support of the debtor's position.

[47 FR 76716, Feb. 22, 1982, as amended at 55 FR 32379, Aug. 9, 1990]

§ 15.32 Contracting for collection services.

The NRC may contract for collection services in order to recover delinquent debts. However, the NRC retains the authority to resolve disputes, compromise claims, suspend or terminate collection action, and initiate enforced collection through litigation. When appropriate, the NRC shall contract for collection services in accordance with the guidance and standards contained in 4 CFR 102.6.

[55 FR 32379, Aug. 9, 1990]

§ 15.33 Collection by administrative offset.

(a) The NRC may administratively undertake collection by offset on each claim which is liquidated or certain in amount in accordance with the guidance and standards contained in 4 CFR 102.2, 102.3, and 102.4 and 5 U.S.C. 5514, as applicable. The NRC may not initiate administrative offset to collect a debt more than 10 years after the Government's right to the debt first accrued, unless facts material to the Government's right to collect the debt were not known and could not reasonably have been known to the NRC or collection of "approval" fees has been deferred under 10 CFR part 170. If the collection of "approval" fees has been deferred, the ten-year period begins to run at the end of the deferral period.

(b) Collection by administrative offset of amounts payable from the Civil Service Retirement and Disability Fund, the Federal Employees Retirement System or other similar funds is made pursuant to 4 CFR 102.4 and the provisions of paragraph (d) of this section.

(c) Salary offset is governed by 5 U.S.C. 5514.

(d) The following procedures apply when the NRC seeks to collect a debt by offset against any payment to be made to a debtor or against the assets of a licensee.

(1) Before the offset is made, the NRC shall provide the debtor with a written notice of the nature and amount of the debt and—

(i) Notice of the NRC's intent to collect the debt by offset;

(ii) An opportunity to inspect and copy NRC records pertaining to the debt;

(iii) An opportunity to request reconsideration of the debt by the NRC or, if provided for by statute, waiver of the debt;

(iv) An opportunity to enter into a written agreement with the NRC to repay or pay the debt, as the case may be;

(v) An explanation of the debtor's rights under this subpart; and

(vi) An opportunity for a hearing when required under the provisions of 4 CFR 102.3(c).

(2) If the NRC learns that other agencies of the Federal government are holding funds payable to the debtor, the NRC shall provide the other agencies with written certification that the debt is owed to the NRC and that the NRC has complied with the provisions of 4 CFR 102.3. The NRC shall request that funds due the debtor which are necessary to offset the debt to the NRC be transferred to the NRC.

(3) The NRC may accept a repayment or payment agreement, as appropriate, in lieu of offset, but will do so only after balancing the Government's interest in collecting the debt against fairness to the debtor. If the debt is delinquent and the debtor has not disputed its existence or amount, the NRC may accept a repayment or payment agreement in lieu of offset only if the debtor is able to establish under sworn affidavit that offset would result in undue financial hardship or would be against equity and good conscience.

(4) Administrative offset is not authorized with respect to—

(i) Debts owed by any State or local government;

(ii) Debts once they become subject to the salary offset provisions of 5 U.S.C. 5514; or

(iii) Any case in which collection of the type of debt involved by administrative offset is explicitly provided for or prohibited by another statute.

(5) The NRC reserves the right to take any other action in respect to offset as is permitted under 4 CFR 102.3.

(e) The NRC shall make appropriate use of the cooperative efforts of other agencies, including use of the Army Holdup List, in effecting collections by offset. The Army Holdup List is a list of contractors indebted to the United States.

[47 FR 7616, Feb. 22, 1982, as amended at 55 FR 32379, Aug. 9, 1990]

§ 15.35 Payments.

(a) *Payment in full.* The NRC shall make every effort to collect a claim in full before it becomes delinquent. If a claim is paid in one lump sum after it becomes delinquent, the NRC shall impose charges for interest, penalties, and administrative costs as specified in § 15.37.

(b) *Payment in installments.* If a debtor furnishes satisfactory evidence of inability to pay a claim in one lump sum, payment in regular installments may be arranged. Evidence may consist of a financial statement or a signed statement that the debtor's application for a loan to enable the debtor to pay the claim in full was rejected. Except for a claim described at 5 U.S.C. 5514, all installment payment arrangements must be in writing and require the payment of interest, and administrative charges.

(1) Installment note forms, including confess-judgment notes, may be used. The written installment agreement must contain a provision accelerating the debt payment in the event the debtor defaults. If the debtor's financial statement discloses the ownership of assets which are free and clear of liens or security interests, or assets in which the debtor owns an equity, the debtor may be asked to secure the payment of an installment note by executing a Security Agreement and Financing Statement transferring to the United States a security interest in the assets until the debt is discharged.

(2) If the debtor owes more than one debt and designates how a voluntary installment payment is to be applied among those debts, the NRC shall follow that designation. If the debtor does not designate the application of the payment, the NRC shall apply the payment to the various debts in accordance with the best interests of the United States, as determined by the facts and circumstances of the particular case.

(c) To whom payment is made. Payment of a debt is made by check, electronic transfer, draft, or money order payable to the United States Nuclear Regulatory Commission and mailed or delivered to the Division of Accounting and Finance, Office of the Controller, U.S. Nuclear Regulatory Commission, Washington, DC 20555, unless payment is—

(1) Made pursuant to arrangements with GAO or DOJ;

(2) Ordered by a Court of the United States; or

(3) Otherwise directed in any othe part of this chapter.

[47 FR 7616, Feb. 22, 1982, as amended at 5 FR 31610, Aug. 21, 1987; 54 FR 53316, De 28, 1989; 55 FR 32379, Aug. 9, 1990]

§ 15.37 Interest, penalties, and administra tive costs.

(a) The NRC shall assess interest penalties, and administrative costs o debts owed to the United States Gov ernment in accordance with the guid ance provided under the Federal Claims Collection Standards, 4 CFR 102.13 unless otherwise directed b statute, regulation, or contract.

(b) Before assessing any charges on delinquent debts, the NRC shall mail or hand-deliver a written notice to the debtor explaining its requirements concerning these charges under 4 CFR 102.2 and 102.13.

(c) Interest begins to accrue from the date on which the initial written demand, advising the debtor of the interest requirements, is first mailed or hand delivered to the debtor unless a different date is specified in a statute, regulation, or contract.

(d) The NRC shall assess interest based upon the rate of the current value of funds to the United States Treasury (the Treasury tax and loan account rate) prescribed for the current quarter and published in the FEDERAL REGISTER and the Treasury Financial Manual Bulletins, unless a different rate is prescribed by statute, regulation, or contract.

(e) Interest is computed only on the principal of the debt and the interest rate remains fixed for the duration of the indebtedness, unless a debtor defaults on a repayment agreement and seeks to enter into a new agreement.

(f) The NRC shall assess against a debtor charges to cover administrative costs incurred as a result of a delinquent debt. Administrative costs may include costs incurred in obtaining a credit report or in using a private debt collector, to the extent they are attributable to the delinquency.

(g) The NRC shall assess a penalty charge of 6 percent a year on any portion of a debt that is delinquent for more than 90 days. The charge accrues retroactively to the date that the debt became delinquent.

(h) Amounts received by the NRC as partial or installment payments are applied first to outstanding penalty and administrative cost charges, second to accrued interest, and third to outstanding principal.

(i) The NRC shall waive collection of interest on the debt or any portion of the debt which is paid in full within 30 days after the date on which interest began to accrue.

(j) The NRC may waive interest during the period a debt disputed under § 15.31 is under investigation or review by the NRC. However, this additional waiver is not automatic and must be requested before the expiration of the initial 30-day waiver period. The NRC may grant the additional waiver only when it finds merit in the explanation the debtor has submitted under § 15.31.

(k) The NRC may waive the collection of interest, penalties, and administrative costs if it finds that one or more of the following conditions exist:

(1) The debtor is unable to pay any significant sum toward the debt within a reasonable period of time;

(2) Collection of interest, penalties, and administrative costs will jeopardize collection of the principal of the debt;

(3) The NRC is unable to enforce collection in full within a reasonable time by enforced collection proceedings; or

(4) Collection would be against equity and good conscience or not in the best interests of the United States, including the situation in which an administrative offset or installment payment agreement is in effect.

[55 FR 32380, Aug. 9, 1990]

§ 15.38 Use of credit reports.

The NRC may institute a credit investigation of the debtor at any time following receipt of knowledge of the debt in order to aid NRC in making appropriate determinations as to:

(a) The collection and compromise of a debt;

(b) The collection of interest, penalties, and administrative costs;

(c) The use of administrative offset;

(d) The use of other collection methods; and

(e) The likelihood of collecting the debt.

[55 FR 32380, Aug. 9, 1990]

§ 15.39 Bankruptcy claims.

When the NRC receives information that a debtor has filed a petition in bankruptcy or is the subject of a bankruptcy proceeding, it shall furnish information concerning the debt owed the United States to the appropriate United States Attorney to permit the filing of a claim.

Subpart C—Compromise of a Claim

§ 15.41 When a claim may be compromised.

The NRC may compromise a claim not in excess of the monetary limitation if it has not been referred to GAO or to DOJ for litigation. Only the Comptroller General of the United States or designee may effect the compromise of a claim that arises out of an exception made by the GA0 in the account of an accountable officer, including a claim against the payee, prior to its referral by GAO for litigation.

[55 FR 32380, Aug. 9, 1990]

§ 15.43 Reasons for compromising a claim.

A claim may be compromised for one or more of the reasons set forth below:

(a) The full amount cannot be collected because:

(1) The debtor is unable to pay the full amount within a reasonable time; or

(2) The debtor refuses to pay the claim in full and the Government is unable to enforce collection in full within a reasonable time by enforced collection proceedings.

(b) There is a real doubt concerning the Government's ability to prove its case in Court for the full amount claimed, either because of the legal issues involved or a bona fide dispute as to the facts.

(c) The cost of collecting the claim does not justify the enforced collection of the full amount. The NRC shall apply this reason for compromise in accordance with the guidance in 4 CFR 103.4.

(d) The NRC shall determine the debtor's inability to pay, the Government's ability to enforce collection, and the amounts which are acceptable in compromise in accordance with the Federal Claims Collection Standards, 4 CFR part 103.

(e) Compromises payable in installments are discouraged, but, if necessary, must be in the form of a legally enforceable agreement for the reinstatement of the prior indebtedness less sums paid thereon. The agreement also must provide that in the event of default—

(1) The entire balance of the debt becomes immediately due and payable; and

(2) The Government has the right to enforce any security interest.

[47 FR 7616, Feb. 22, 1982, as amended at 55 FR 32380, Aug. 9, 1990]

§ 15.45 Restrictions on the compromise of a claim.

(a) The NRC may not accept a percentage of a debtor's profits nor stock in a debtor corporation in compromise of a claim. In negotiating a compromise with a business concern, consideration is given to requiring a waiver of the tax-loss-carry-forward and tax-loss-carry-back rights of the debtor.

(b) If two or more debtors are jointly and severally liable, collection action is not withheld against one debtor until the other or others pay their proportionate share. The amount of a compromise with one debtor is not considered a precedent or as morally binding in determining the amount which will be required from other debtors jointly and severally liable on the claim.

[47 FR 7616, Feb. 22, 1982, as amended at 55 FR 32380, Aug. 9, 1990]

§ 15.47 Finality of a compromise.

An offer of compromise must be in writing and signed by the debtor. An offer of compromise which is accepted by the NRC is final and conclusive on the debtor and on all officials, agencies, and courts of the United States, unless obtained by fraud, misrepresentation, the presentation of a false claim, or mutual mistake of fact.

Subpart D—Suspension or Termination of Collection Action

§ 15.51 When collection action may be suspended or terminated.

The NRC may suspend or terminate collection action on a claim not in excess of the monetary limitation, exclusive of interest, penalties, and administrative costs, after deducting the amount of partial payments, if any, if it has not been referred to GAO or to DOJ for litigation.

[55 FR 32380, Aug. 9, 1990]

§ 15.53 Reasons for suspending collection action.

Collection action may be suspended temporarily:

(a) When the debtor cannot be located after diligent efforts and there is reason to believe that future collection action may be sufficiently productive to justify periodic review and action on the claim considering the size of the claim and the amount which may be realized on it; or

(b) When the debtor owns no substantial equity in realty and is unable to make payments on the Government's claim or effect a compromise on it at the time but the debtor's future prospects justify retention of the claim for periodic review and action and:

(1) The applicable statute of limitations has been tolled or started anew; or

(2) Future collection can be effected by offset notwithstanding the statute of limitations.

§ 15.55 Reasons for terminating collection action.

Collection action may be terminated:

(a) When it becomes clear that the Government cannot collect or enforce collection of any significant sum from the debtor having due regard for the judicial remedies available to the Government, the debtor's future financial prospects, and the exemptions available to the debtor under State and Federal law;

(b) When the debtor cannot be located, there is no security remaining to be liquidated, the applicable statute of limitations has run, and the prospects of collecting by offset notwithstanding the bar of the statute of limitations is too remote to justify retention of the claim; or

(c) When it is likely that the cost of collection action will exceed the amount recoverable.

§ 15.57 Termination of collection action.

Collection action shall be terminated:

(a) Whenever it is determined that the claim is legally without merit; or

(b) When it is determined that the evidence necessary to prove the claim cannot be produced or the necessary witnesses are unavailable and efforts to induce voluntary payments have been unavailing.

§ 15.59 Transfer of a claim.

The NRC may transfer a claim to the GAO for advice when there is doubt whether collection action should be suspended or terminated.

Subpart E—Referral of a Claim

§ 15.61 Prompt referral.

(a) A claim which requires enforced collection action is referred to GAO or to DOJ for litigation. A referral is made as early as possible consistent with aggressive collection action and in any event well within the time required to bring a timely suit against the debtor. Ordinarily, referrals are made within one year of the NRC's final determination of the fact and the amount of the debt.

(b) When the merits of the NRC's claim, the amount owed on the claim, or the propriety of acceptance of a proposed compromise, suspension, or termination of collection actions is in doubt, the NRC shall refer the matter to the GAO for resolution and instructions prior to proceeding with collection action and/or referral to DOJ for litigation.

(c) The NRC may refer a claim to the GAO or the DOJ even though the termination of collection activity might otherwise be given consideration under § 15.55(a) or (c) if:

(1) A significant enforcement policy is involved in reducing a statutory penalty or forfeiture to judgment; or

(2) Recovery of a judgment is a prerequisite to the imposition of administrative sanctions, such as suspension or revocation of a license or the privilege of participating in a Government sponsored program.

(d) Once a claim has been referred to GAO or to DOJ under this subpart, the NRC shall refrain from having any contact with the debtor and shall direct the debtor to GAO or DOJ, as appropriate, when questions concerning the claim are raised by the debtor. The NRC shall immediately advise GAO or DOJ, as appropriate, of any payments by the debtor.

[47 FR 7616, Feb. 22, 1982, as amended at 55 FR 32380, Aug. 9, 1990]

§ 15.65 Referral of a compromise offer.

The NRC may refer a debtor's firm written offer of compromise which is substantial in amount to the GAO or to the DOJ if the NRC is uncertain whether the offer should be accepted.

§ 15.67 Referral to the Department of Justice.

(a) Claims for which the gross original amount is over $100,000 must be referred to the Commercial Litigation Branch, Civil Division, Department of Justice, Washington, DC 20530. Claims for which the gross original amount is $100,000 or less must be referred to the United States Attorney in whose district the debtor can be found.

(b) A claim of less than $600, exclusive of interest, is not referred for litigation unless:

(1) Referral is important to a significant enforcement policy; or

(2) The debtor not only has the clear ability to pay the claim but the Government can effectively enforce payment.

(c) A claim on which the NRC holds a judgment is referred to the DOJ for further action if renewal of the judgment lien or enforced collection proceedings are justified under the criteria discussed in this part.

(d) Claims must be referred to the Department of Justice in the manner prescribed by 4 CFR 105.2. Care must be taken to preserve all files, records, and exhibits on claims referred under paragraphs (a) and (b) of this section.

[47 FR 7616, Feb. 22, 1982, as amended at 55 FR 32381, Aug. 9, 1990]

PART 19—NOTICES, INSTRUCTIONS AND REPORTS TO WORKERS: INSPECTION AND INVESTIGATIONS

Sec.

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AUTHORITY: Secs. 53, 63, 81, 103, 104, 161, 186, 68 Stat. 930, 933, 935, 936, 937, 948, 955, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2073, 2093, 2111, 2133, 2134, 2201, 2236, 2282); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841). Pub. L. 95-601, sec. 10, 92 Stat. 2951 (42 U.S.C. 5851).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273); §§ 19.11(a), (c), (d), and (e) and 19.12 are issued under sec. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201(b)); and §§ 19.13 and 19.14(a) are issued under sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

SOURCE: 38 FR 22217, Aug. 17, 1973, unless otherwise noted.

§ 19.1 Purpose.

The regulations in this part establish requirements for notices, instructions, and reports by licensees to individuals participating in licensed activities and options available to these individuals in connection with Commission inspections of licensees to ascertain compliance with the provisions of the Atomic Energy Act of 1954, as amended, Title II of the Energy Reorganization Act of 1974, and regulations, orders, and licenses thereunder regarding radiological working conditions. The regulations in this part also establish the rights and responsibilities of the Commission and individuals during interviews compelled by subpoena as part of agency inspections or investigations pursuant to section 161c of the Atomic Energy Act of 1954, as amended, on any matter within the Commission's jurisdiction.

[55 FR 247, Jan. 4, 1990]

§ 19.2 Scope. Scope.

The regulations in this part apply to all persons who receive, possess, use, or transfer material licensed by the Nuclear Regulatory Commission pursuant to the regulations in parts 30 through 35, 39, 40, 60, 61, or part 72 of this chapter, including persons licensed to operate a production or utilization facility pursuant to part 50 of this chapter and persons licensed to possess power reactor spent fuel in an independent spent fuel storage installation (ISFSI) pursuant to part 72 of this chapter. The regulations regarding interviews of individuals under subpoena apply to all investigations and inspections within the jurisdiction of the Nuclear Regulatory Commission other than those involving NRC employees or NRC contractors. The regulations in this part do not apply to subpoenas issued pursuant to 10 CFR 2.720.

[55 FR 247, Jan. 4, 1990]

§ 19.3 Definitions.

As used in this part:

Act means the Atomic Energy Act of 1954, (68 Stat. 919) including any amendments thereto.

Commission means the United States Nuclear Regulatory Commission.

Exclusion means the removal of counsel from interviews whenever the NRC official conducting the interview has a reasonable basis to believe that counsel's representation of multiple interests will obstruct, impede, or impair the particular investigation, inspection or inquiry.

License means a license issued under the regulations in Parts 30 through 35, 39, 40, 60, 61, 70, or 72 of this chapter, including licenses to operate a production or utilization facility pursuant to Part 50 of this chapter. *Licensee* means the holder of such a license.

Restricted area means any area access to which is controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials. "Restricted area" shall not include any areas used as residential quarters, although a separate room or rooms in a residential building may be set apart as a restricted area.

Sequestration means the separation or isolation of witnesses and their attorneys from other witnesses and their attorneys during an interview conducted as part of an investigation, inspection, or other inquiry.

Worker means an individual engaged in activities licensed by the Commission and controlled by a licensee, but does not include the licensee.

[38 FR 22217, Aug. 17, 1973, as amended at 40 FR 8783, Mar. 3, 1975; 53 FR 31680, Aug. 19, 1988; 55 FR 247, Jan. 4, 1990]

§ 19.4 Interpretations.

Except as specifically authorized by the Commission in writing, no interpretation of the meaning of the regulations in this part by any officer or employee of the Commission other than a written interpretation by the General Counsel will be recognized to be binding upon the Commission.

§ 19.5 Communications.

Except where otherwise specified in this part, all communications and reports concerning the regulations in this part should be addressed to the Regional Administrator of the appropriate U.S. Nuclear Regulatory Commission Regional Office listed in Appendix D of Part 20 of this chapter. Communications, reports, and applications may be delivered in person at the Commission's offices at 2120 L Street, NW., Washington, DC, or at 11555 Rockville Pike, Rockville, Maryland.

[53 FR 6138, Mar. 1, 1988, as amended at 53 FR 43420, Oct. 27, 1988]

§ 19.8 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). OMB has approved the information collection requirements contained in this part under control number 3150-0044.

(b) The approved information collection requirements contained in this part appear in § 19.13.

[49 FR 19624, May 9, 1984]

§ 19.11 Posting of notices to workers.

(a) Each licensee shall post current copies of the following documents:

(1) The regulations in this part and in Part 20 of this chapter;

(2) The license, license conditions, or documents incorporated into a license by reference, and amendments thereto;

(3) The operating procedures applicable to licensed activities;

(4) Any notice of violation involving radiological working conditions, proposed imposition of civil penalty, or order issued pursuant to Subpart B of Part 2 of this chapter, and any response from the licensee.

(b) If posting of a document specified in paragraph (a) (1), (2) or (3) of this section is not practicable, the licensee may post a notice which describes the document and states where it may be examined.

(c) Each licensee and applicant shall post Form NRC-3, (Revision 6-82 or later) "Notice to Employees," as required by Parts 30, 40, 50, 60, 70, 72, and 150 of this chapter.

NOTE: Copies of Form NRC-3 may be obtained by writing to the Regional Administrator of the appropriate U.S. Nuclear Regulatory Commission Regional Office listed in Appendix D of Part 20 of this chapter.

(d) Documents, notices, or forms posted pursuant to this section shall appear in a sufficient number of places to permit individuals engaged in licensed activities to observe them on the way to or from any particular licensed activity location to which the document applies, shall be conspicuous, and shall be replaced if defaced or altered.

(e) Commission documents posted pursuant to paragraph (a)(4) of this section shall be posted within 2 working days after receipt of the documents from the Commission; the licensee's response, if any, shall be posted within 2 working days after dispatch by the licensee. Such documents shall remain posted for a minimum of 5 working days or until action correcting the violation has been completed, whichever is later.

[38 FR 22217, Aug. 17, 1973, as amended at 40 FR 8783, Mar. 3, 1975; 47 FR 30454, July 14, 1982; 52 FR 31610, Aug. 21, 1987]

§ 19.12 Instructions to workers.

All individuals working in or frequenting any portion of a restricted area shall be kept informed of the storage, transfer, or use of radioactive materials or of radiation in such portions of the restricted area; shall be instructed in the health protection problems associated with exposure to such radioactive materials or radiation, in precautions or procedures to minimize exposure, and in the purposes and functions of protective devices employed; shall be instructed in, and instructed to observe, to the extent within the worker's control, the applicable provisions of Commission regulations and licenses for the protection of personnel from exposures to radiation or radioactive materials occurring in such areas; shall be instructed of their responsibility to report promptly to the licensee any condition which may lead to or cause a violation of Commission regulations and licenses or unnecessary exposure to radiation or to radioactive material; shall be instructed in the appropriate response to warnings made in the event of any unusual occurrence or malfunction that may involve exposure to radiation or radioactive material; and shall be advised as to the radiation exposure reports which workers may request pursuant to § 19.13. The extent of these instructions shall be commensurate with potential radiological health protection problems in the restricted area.

§ 19.13 Notifications and reports to individuals.

(a) Radiation exposure data for an individual, and the results of any measurements, analyses, and calculations of radioactive material deposited or retained in the body of an individual, shall be reported to the individual as specified in this section. The information reported shall include data and results obtained pursuant to Commission regulations, orders or license conditions, as shown in records maintained by the licensee pursuant to Commission regulations. Each notification and report shall: be in writing; include appropriate identifying data such as the name of the licensee, the name of the individual, the individual's social security number; include the individual's exposure information; and contain the following statement:

> This report is furnished to you under the provisions of the Nuclear Regulatory Commission regulation 10 CFR Part 19. You should preserve this report for further reference.

(b) At the request of any worker, each licensee shall advise such worker annually of the worker's exposure to radiation or radioactive material as shown in records maintained by the licensee pursuant to § 20.401(a) and (c).

(c) At the request of a worker formerly engaged in licensed activities controlled by the licensee, each licensee shall furnish to the worker a report of the worker's exposure to radiation or radioactive material. Such report shall be furnished within 30 days from the time the request is made, or within 30 days after the exposure of the individual has been determined by the licensee, whichever is later; shall cover, within the period of time specified in the request, each calendar quarter in which the worker's activities involved exposure to radiation from radioactive materials licensed by the Commission; and shall include the dates and locations of licensed activities in which the worker participated during this period.

(d) When a licensee is required pursuant to § 20.405 or § 20.408 of this chapter to report to the Commission any exposure of an individual to radiation or radioactive material the licensee shall also provide the individual a report on his exposure data included therein. Such report shall be transmitted at a time not later than the transmittal to the Commission.

(e) At the request of a worker who is terminating employment in a given calendar quarter with the licensee in work involving radiation dose, or of a worker who, while employed by another person, is terminating assignment to work involving radiation dose in the licensee's facility in that calendar quarter, each licensee shall provide to each such worker, or to the worker's designee, at termination, a written report regarding the radiation dose received by that worker from operations of the licensee during that specifically identified calendar quarter or fraction thereof, or provide a written estimate of that dose if the finally determined personnel monitoring results are not available at that time. Estimated doses shall be clearly indicated as such.

[38 FR 22217, Aug. 17, 1973, as amended at 40 FR 8783, Mar. 3, 1975; 44 FR 32352, June 6, 1979]

§ 19.14 Presence of representatives of licensees and workers during inspections.

(a) Each licensee shall afford to the Commission at all reasonable times opportunity to inspect materials, activities, facilities, premises, and records pursuant to the regulations in this chapter.

(b) During an inspection, Commission inspectors may consult privately with workers as specified in § 19.15. The licensee or licensee's representative may accompany Commission inspectors during other phrases of an inspection.

(c) If, at the time of inspection, an individual has been authorized by the workers to represent them during Commission inspections, the licensee shall notify the inspectors of such authorization and shall give the workers' representative an opportunity to accompany the inspectors during the inspection of physical working conditions.

(d) Each workers' representative shall be routinely engaged in licensed activities under control of the licensee and shall have received instructions as specified in § 19.12.

(e) Different representatives of licensees and workers may accompany the inspectors during different phases of an inspection if there is no resulting interference with the conduct of the inspection. However, only one workers' representative at a time may accompany the inspectors.

(f) With the approval of the licensee and the workers' representative an individual who is not routinely engaged in licensed activities under control of the license, for example, a consultant to the licensee or to the workers' representative, shall be afforded the opportunity to accompany Commission inspectors during the inspection of physical working conditions.

(g) Notwithstanding the other provisions of this section, Commission inspectors are authorized to refuse to permit accompaniment by any individual who deliberately interferes with a fair and orderly inspection. With regard to areas containing information classified by an agency of the U.S. Government in the interest of national security, an individual who accompanies an inspector may have access to such information only if authorized to do so. With regard to any area containing proprietary information, the workers' representative for that area shall be an individual previously authorized by the licensee to enter that area.

§ 19.15 Consultation with workers during inspections.

(a) Commission inspectors may consult privately with workers concerning matters of occupational radiation protection and other matters related to applicable provisions of Commission regulations and licenses to the extent the inspectors deem necessary for the conduct of an effective and thorough inspection.

(b) During the course of an inspection any worker may bring privately to the attention of the inspectors, either orally or in writing, any past or present condition which he has reason to believe may have contributed to or caused any violation of the act, the regulations in this chapter, or license condition, or any unnecessary exposure of an individual to radiation from licensed radioactive material under the licensee's control. Any such notice in writing shall comply with the requirements of § 19.16(a).

(c) The provisions of paragraph (b) of this section shall not be interpreted as authorization to disregard instructions pursuant to § 19.12.

§ 19.16 Requests by workers for inspections.

(a) Any worker or representative of workers who believes that a violation of the Act, the regulations in this chapter, or license conditions exists or has occurred in license activities with regard to radiological working conditions in which the worker is engaged, may request an inspection by giving notice of the alleged violation to the Administrator of the appropriate Commission Regional Office, or to Commission inspectors. Any such notice shall be in writing, shall set forth the specific grounds for the notice, and shall be signed by the worker or representative of workers. A copy shall be provided the licensee by the Regional Office Administrator, or the inspector no later than at the time of inspection except that, upon the request of the worker giving such notice, his name and the name of individuals referred to therein shall not appear in such copy or on any record published, released or made available by the Commission, except for good cause shown.

(b) If, upon receipt of such notice, the Regional Office Administrator determines that the complaint meets the requirements set forth in paragraph (a) of this section, and that there are reasonable grounds to believe that the alleged violation exists or has occurred, he shall cause an inspection to be made as soon as practicable, to determine if such alleged violation exists or has occurred. Inspections pursuant to this section need not be limited to matters referred to in the complaint.

[38 FR 22217, Aug. 17, 1973, as amended at 40 FR 8783, Mar. 3, 1975; 47 FR 30454, July 14, 1982; 52 FR 31610, Aug. 21, 1987]

§ 19.17 Inspections not warranted; informal review.

(a) If the Administrator of the appropriate Regional Office determines, with respect to a complaint under § 19.16, that an inspection is not warranted because there are no reasonable grounds to believe that a violation exists or has occurred, he shall notify the complainant in writing of such determination. The complainant may obtain review of such determination by submitting a written statement of position with the Executive Director for Operation, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, who will provide the licensee with a copy of such statement by certified mail, excluding, at the request of the complainant, the name of the complainant. The licensee may submit an opposing written statement of position with the Executive Director for Operations who will provide the complainant with a copy of such statement by certified mail. Upon the request of the complainant, the Executive Director for Operations or his designee may hold an informal conference in which the complainant and the licensee may orally present their views. An informal conference may also be held at the request of the licensee, but disclosure of the identity of the complainant will be made only following receipt of written authorization from the complainant. After considering all written and oral views presented, the Executive Director for Operations shall affirm, modifying, or reverse the determination of the Administrator of the appropriate Regional Office and furnish the complainant and the licensee a written notification of his decision and the reason therefor.

(b) If the Administrator of the appropriate Regional Office determines that an inspection is not warranted because the requirements of § 19.16(a) have not been met, he shall notify the complainant in writing of such determination. Such determination shall be without prejudice to the filing of a new complaint meeting the requirements of § 19.16(a).

[38 FR 22217, Aug. 17, 1973, as amended at 40 FR 8783, Mar. 3, 1975; 52 FR 31610, Aug. 21, 1987]

§ 19.18 Sequestration of witnesses and exclusion of counsel in interviews conducted under subpoena.

(a) All witnesses compelled by subpoena to submit to agency interviews shall be sequestered unless the official conducting the interviews permits otherwise.

(b) Any witness compelled by subpoena to appear at an interview during an agency inquiry may be accompanied, represented, and advised by counsel of his or her choice; however, when the agency official conducting the inquiry determines, after consultation with the Office of the General Counsel, that a reasonable basis exists to believe that the investigation or inspection will be obstructed, impeded or impaired, either directly or indirectly, by an attorney's representation of multiple interests, the agency official may prohibit that attorney from being present during the interview.

(c) The interviewing official is to provide a witness whose counsel has been excluded under paragraph (b) of this section and the witness's counsel a written statement of the reasons supporting the decision to exclude. This statement, which must be provided no later than five working days after the exclusion, must explain the basis for counsel's exclusion.

(d) Within five days after receipt of the written notification required in paragraph (c) of this section a witness whose counsel has been excluded may appeal the exclusion decision by filing a motion to quash the subpoena with the Commission. The filing of the motion to quash will stay the effectiveness of the subpoena pending the Commission's decision on the motion.

(e) Where a witness's counsel is excluded under paragraph (b) of this section, the interview may, at the witness's request, either proceed without counsel or be delayed for a reasonable period of time to permit the retention of new counsel. The interview may also be rescheduled to a subsequent date established by the NRC.

[55 FR 247, Jan. 4, 1990]

§ 19.20 Employee protection.

Employment discrimination by a licensee or a contractor or subcontractor of a licensee against an employee for engaging in protected activities under this part or Parts 30, 40, 50, 60, 70, 72, or 150 of this chapter is prohibited.

[47 FR 30454, July 14, 1982]

§ 19.30 Violations.

An injunction or other court order may be obtained prohibiting any violation of any provision of the Act or Title II of the Energy Reorganization Act of 1974, or any regulation or order issued thereunder. A court order may be obtained for the payment of a civil penalty imposed pursuant to section 234 of the Act for violation of sections 53, 57, 62, 63, 81, 82, 101, 103, 104, 107, or 109 of the Act or any rule, regulation, or order issued thereunder, or any term, condition or limitation of any licensee issued thereunder, or for any violation for which a license may be revoked under section 186 of the Act. Any person who willfully violates any provision of the Act or any regulation or order issued thereunder may be guilty of a crime and, upon conviction, may be punished by fine or imprisonment or both, as provided by law.

[38 FR 22217, Aug. 17, 1973, as amended at 40 FR 8783, Mar. 3, 1975]

§ 19.31 Application for exemptions.

The Commission may upon application by any licensee or upon its own initiative, grant such exemptions from the requirements of the regulations in this part as it determines are authorized by law and will not result in undue hazard to life or property.

§ 19.32 Discrimination prohibited.

No person shall on the ground of sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity licensed by the Nuclear Regulatory Commission. This provision will be enforced through agency provisions and rules similar to those already established, with respect to racial and other discrimination, under Title VI of the Civil Rights Act of 1964. This remedy is not exclusive, however, and will not prejudice or cut of any other legal remedies available to a discriminatee.

[40 FR 8783, Mar. 3, 1975]

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AUTHORITY: Secs. 53, 63, 65, 81, 103, 104, 161, 68 Stat. 930, 933, 935, 936, 937, 948, as amended (42 U.S.C. 2073, 2093, 2095, 2111, 2133, 2134, 2201); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

Section 20.408 also issued under secs. 135, 141, Pub. L. 97-425, 96 Stat. 2232, 2241 (42 U.S.C. 10155, 10161).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273), §§ 20.101, 20.102, 20.103 (a), (b) and (f), 20.104 (a) and (b), 20.105(b), 20.106(a), 20.201, 20.202(a), 20.205, 20.207, 20.301, 20.303, 20.304, and 20.305 are issued under sec. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201(b)); and §§ 20.102, 20.103(e), 20.401-20.407, 20.408(b) and 20.409 are issued under sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

SOURCE: 25 FR 10914, Nov. 17, 1960, unless otherwise noted.

GENERAL PROVISIONS

§ 20.1 Purpose.

(a) The regulations in this part establish standards for protection against radiation hazards arising out of activities under licenses issued by the Nuclear Regulatory Commission and are issued pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974.

(b) The use of radioactive material or other sources of radiation not licensed by the Commission is not subject to the regulations in this part. However, it is the purpose of the regulations in this part to control the possession, use, and transfer of licensed material by any licensee in such a manner that the total dose to an individual (including exposures to licensed and unlicensed radioactive material and to other unlicensed sources of radiation, whether in the possession of the licensee or any other person, but not including exposures to radiation from natural background sources or medical diagnosis and therapy) does not exceed the standards of radiation protection prescribed in the regulations in this part.

(c) In accordance with recommendations of the Federal Radiation Council, approved by the President, persons engaged in activities under licenses issued by the Nuclear Regulatory Commission pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974 should, in addition to complying with the requirements set forth in this part, make every reasonable effort to maintain radiation exposures, and releases of radioactive materials in effluents to unrestricted areas, as low as is reasonably achievable. The term "as low as is reasonably achievable" means as low as is reasonably achievable taking into account the state of technology, and the economics of improvements in relation to benefits to the public health and safety, and other societal and socioeconomic considerations, and in relation to the utilization of atomic energy in the public interest.

[25 FR 10914, Nov. 17, 1960, as amended at 40 FR 8783, Mar. 3, 1975; 40 FR 58847, Dec. 19, 1975; 44 FR 32352, June 6, 1979]

§ 20.2 Scope.

The regulations in this part apply to all persons who receive, possess, use, or transfer material licensed pursuant to the regulations in Parts 30 through 35, 39, 40, 60, 61, 70, or 72 of this chapter, including persons licensed to operate a production or utilization facility pursuant to Part 50 of this chapter.

[53 FR 31680, Aug. 19, 1988]

§ 20.3 Definitions.

(a) As used in this part:

(1)*Act* means the Atomic Energy Act of 1954 (68 Stat. 919) including any amendments thereto;

(2)*Airborne radioactive material* means any radioactive material dispersed in the air in the form of dusts, fumes, mists, vapors, or gases;

(3)*Byproduct material* means any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material;

(4)*Calendar quarter* means not less than 12 consecutive weeks nor more than 14 consecutive weeks. The first calendar quarter of each year shall begin in January and subsequent calendar quarters shall be such that no day is included in more than one calendar quarter or omitted from inclusion within a calendar quarter. No licensee shall change the method observed by him of determining calendar quarters except at the beginning of a calendar year.

(5)*Commission* means the Nuclear Regulatory Commission or its duly authorized representatives;

(6)*Government agency* means any executive department, commission, independent establishment, corporation, wholly or partly owned by the United States of America which is an instrumentality of the United States, or any board, bureau, division, service, office, officer, authority, administration, or other establishment in the executive branch of the Government;

(7)*Individual* means any human being;

(8)*Licensed material* means source material, special nuclear material, or by-product material received, possessed, used, or transferred under a general or specific license issued by the Commission pursuant to the regulations in this chapter;

(9)*License* means a license issued under the regulations in Parts 30 through 35, 39, 40, 60, 61, 70, or Part

72 of this chapter. "Licensee" means the holder of such license;

(10)*Occupational dose* includes exposure of an individual to radiation (i) in a restricted area; or (ii) in the course of employment in which the individual's duties involve exposure to radiation, provided, that "occupational dose" shall not be deemed to include any exposure of an individual to radiation for the purpose of medical diagnosis or medical therapy of such individual.

(11)*Person* means: (i) Any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, Government agency other than the Commission or the Department (except that the Department shall be considered a person within the meaning of the regulations in this part to the extent that its facilities and activities are subject to the licensing and related regulatory authority of the Commission pursuant to section 202 of the Energy Reorganization Act of 1974 (88 Stat. 1244)), any State, any foreign government or nation or any political subdivision of any such government or nation, or other entity; and (ii) any legal successor, representative, agent, or agency of the foregoing.

(12)*Radiation* means any or all of the following: alpha rays, beta rays, gamma rays, X-rays, neutrons, high-speed electrons, high-speed protons, and other atomic particles; but not sound or radio waves, or visible, infrared, or ultraviolet light;

(13)*Radioactive material* includes any such material whether or not subject to licensing control by the Commission;

(14)*Restricted area* means any area access to which is controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials. "Restricted area" shall not include any areas used as residental quarters, although a separate room or rooms in a residential building may be set apart as a restricted area;

(15)*Source material* means: (i) Uranium or thorium, or any combination thereof, in any physical or chemical form; or (ii) ores which contain by weight one-twentieth of one percent (0.05%) or more of (*a*) uranium, (*b*) thorium or (*c*) any combination thereof. Source material does not include special nuclear material.

(16)*Special nuclear material* means (i) Plutonium, uranium 233, uranium enriched in the isotope 233 or in the isotope 235, and any other material which the Commission, pursuant to the provisions of section 51 of the act, determines to be special nuclear material, but does not include source material; or (ii) any material artificially enriched by any of the foregoing but does not include source material;

(17)*Unrestricted area* means any area access to which is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials and any area used for residential quarters.

(18)*Department* means the Department of Energy established by the Department of Energy Organization Act (Pub. L. 95-91, 91 Stat. 565, 42 U.S.C. 7101 *et seq.*) to the extent that the Department, or its duly authorized representatives, exercises functions formerly vested in the U.S. Atomic Energy Commission, its Chairman, members, officers and components and transferred to the U.S. Energy Research and Development Administration and to the Administrator thereof pursuant to sections 104 (b), (c) and (d) of the Energy Reorganization Act of 1974 (Pub. L. 93-438, 88 Stat. 1233 at 1237, 42 U.S.C. 5814) and retransferred to the Secretary of Energy pursuant to section 301(a) of the Department of Energy Organization Act (Pub. L. 95-91, 91 Stat. 565 at 577-578, 42 U.S.C. 7151).

(19)*Termination* means the end of employment with the licensee or, in the case of individuals not employed by the licensee, the end of a work assignment in the licensee's restricted areas in a given calendar quarter, without expectation or specific scheduling of reentry into the licensee's restricted areas during the remainder of that calendar quarter.

(20)*Dosimetry processor* means an individual or an organization that processes and evaluates personnel monitoring equipment in order to determine the radiation dose delivered to the equipment.

(b) Definitions of certain other words and phrases as used in this part are set forth in other sections, including:

(1) *Airborne radioactivity area* defined in § 20.203;

(2) *Radiation area* and *high radiation area* defined in § 20.202;

(3) *Personnel monitoring equipment* defined in § 20.202;

(4) *Survey* defined in § 20.201;

(5) Units of measurement of dose (rad, rem) defined in § 20.4;

(6) Units of measurement of radioactivity defined in § 20.5.

[25 FR 10914, Nov. 17, 1960, as amended at 25 FR 13953, Dec. 30, 1960; 27 FR 5905, June 22, 1962; 38 FR 22467, Aug. 21, 1973; 40 FR 8783, Mar. 3, 1975; 40 FR 42558, Sept. 15, 1975; 44 FR 32352, June 6, 1979; 45 FR 14200, Mar. 5, 1980; 46 FR 58282, Dec. 1, 1981; 47 FR 57479, Dec. 27, 1982; 52 FR 4604, Feb. 13, 1987; 52 FR 8240, Mar. 17, 1987]

§ 20.4 Units of radiation dose.

(a) "Dose," as used in this part, is the quantity of radiation absorbed, per unit of mass, by the body or by any portion of the body. When the regulations in this part specify a dose during a period of time, the dose means the total quantity of radiation absorbed, per unit of mass, by the body or by any portion of the body during such period of time. Several different units of dose are in current use. Definitions of units as used in this part are set forth in paragraphs (b) and (c) of this section.

(b) The rad, as used in this part, is a measure of the dose of any ionizing radiation to body tissues in terms of the energy absorbed per unit mass of the tissue. One rad is the dose corresponding to the absorption of 100 ergs per gram of tissue. (One millirad (mrad)=0.001 rad.)

(c) The rem, as used in this part, is a measure of the dose of any ionizing radiation to body tissues in terms of its estimated biological effect relative to a dose of one roentgen (r) of X-rays. (One millirem (mrem)=0.001 rem.) The relation of the rem to other dose units depends upon the biological effect under consideration and upon the conditions of irradiation. For the purpose of the regulations in this part, any of the following is considered to be equivalent to a dose of one rem:

(1) A dose of 1 r due to X- or gamma radiation;

(2) A dose of 1 rad due to X-, gamma, or beta radiation;

(3) A dose of 0.1 rad due to neutrons or high energy protons;

(4) A dose of 0.05 rad due to particles heavier than protons and with sufficient energy to reach the lens of the eye; If it is more convenient to measure the neutron flux, or equivalent, than to determine the neutron dose in rads, as provided in paragraph (c)(3) of this section, one rem of neutron radiation may, for purposes of the regulations in this part, be assumed to be equivalent to 14 million neutrons per square centimeter incident upon the body; or, if there exists sufficient information to estimate with reasonable accuracy the approximate distribution in energy of the neutrons, the incident number of neutrons per square centimeter equivalent to one rem may be estimated from the following table:

NEUTRON FLUX DOSE EQUIVALENTS

Neutron energy (Mev)	Number of neutrons per square centimeter equivalent to a dose of 1 rem (neutrons/cm²)	Average flux to delivery 100 millirem in 40 hours (neutrons/cm² sec.)
Thermal	970×10^{6}	670
0.0001	720×10^{6}	500
0.005	820×10^{6}	570
0.02	400×10^{6}	280
0.1	120×10^{6}	80
0.5	43×10^{6}	30
1.0	26×10^{6}	18
2.5	29×10^{6}	20
5.0	26×10^{6}	18
7.5	24×10^{6}	17
10	24×10^{6}	17
10 to 30	14×10^{6}	10

(d) For determining exposures to X or gamma rays up to 3 Mev, the dose limits specified in §§ 20.101 to 20.104, inclusive, may be assumed to be equivalent to the "air dose". For the purpose of this part "air dose" means that the dose is measured by a properly calibrated appropriate instrument in air at or near the body surface in the region of highest dosage rate.

§ 20.5 Units of radioactivity.

(a) Radioactivity is commonly, and for purposes of the regulations in this part shall be, measured in terms of disintegrations per unit time or in curies. One curie $=3.7\times10^{10}$ disintegrations per second (dps) $=2.2\times10^{12}$ disintegrations per minute (dpm). Commonly used submultiples of the curie are the millicurie and the microcurie:

(1) One millicurie (mCi) [1]$=0.001$ curie (Ci) [1]$=3.7\times10^{7}$ dps.

(2) One microcurie (μCi) [1]$=0.000001$ curie $=3.7\times10^{4}$ dps.

[25 FR 10914, Nov. 17, 1960, as amended at 38 FR 29314, Oct. 24, 1973; 39 FR 23990, June 28, 1974; 40 FR 50705, Oct. 31, 1975]

§ 20.6 Interpretations.

Except as specifically authorized by the Commission in writing, no interpretation of the meaning of the regulations in this part by any officer or employee of the Commission other than a written interpretation by the General Counsel will be recognized to be binding upon the Commission.

§ 20.7 Communications.

Except where otherwise specified in this part, all communications and reports concerning the regulations in this part should be addressed to the Executive Director for Operations, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Communications, reports, and applications may be delivered in person at the Commission's offices at 2120 L Street, NW., Washington, DC, or at 11555 Rockville Pike, Rockville, Maryland.

[53 FR 6139, Mar. 1, 1988, as amended at 53 FR 43420, Oct. 27, 1988]

§ 20.8 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). OMB has approved the information collection requirements contained in this part under control number 3150-0014.

(b) The approved information collection requirements contained in this part appear in §§ 20.102, 20.103, 20.105, 20.106, 20.203, 20.205, 20.302, 20.311, 20.401, 20.402, 20.403, 20.405, 20.407, 20.408, and 20.409.

(c) This part contains information collection requirements in addition to those approved under the control number specified in paragraph (a) of this section. These information collection requirements and the control numbers under which they are approved are as follows:

(1) In §§ 20.101 and 20.102, Form NRC-4 is approved under control number 3150-0005.

(2) In § 20.401, Form NRC-5 is approved under control number 3150-0006.

[49 FR 19624, May 9, 1984]

PERMISSIBLE DOSES, LEVELS, AND CONCENTRATIONS

§ 20.101 Radiation dose standards for individuals in restricted areas.

(a) In accordance with the provisions of § 20.102(a), and except as provided in paragraph (b) of this section, no licensee shall possess, use, or transfer licensed material in such a manner as to cause any individual in a restricted area to receive in any period of one calendar quarter from radioactive material and other sources of radiation a total occupational dose in excess of the standards specified in the following table:

REMS PER CALENDAR QUARTER

1. Whole body; head and trunk; active blood-forming organs; lens of eyes, or gonads	1¼
2. Hands and forearms, feet and ankles	18¾
3. Skin of whole body	7½

(b) A licensee may permit an individual in a restricted area to receive a total occupational dose to the whole body greater than that permitted under paragraph (a) of this section, provided:

(1) During any calendar quarter the total occupational dose to the whole body shall not exceed 3 rems; and

(2) The dose to the whole body, when added to the accumulated occupational dose to the whole body, shall

ot exceed 5 (N-18) rems where "N" equals the individual's age in years at his last birthday; and

(3) The licensee has determined the individual's accumulated occupational dose to the whole body on Form NRC-4, or on a clear and legible record containing all the information required in that form; and has otherwise complied with the requirements of § 20.102. As used in paragraph (b), "Dose to the whole body" shall be deemed to include any dose to the whole body, gonads, active blood-forming organs, head and trunk, or lens of eye.

[25 FR 10914, Nov. 17, 1960, as amended at 44 FR 32352, June 6, 1979]

§ 20.102 Determination of prior dose.

(a) Each licensee shall require any individual, prior to first entry of the individual into the licensee's restricted area during each employment or work assignment under such circumstances that the individual will receive or is likely to receive in any period of one calendar quarter an occupational dose in excess of 25 percent of the applicable standards specified in § 20.101(a) and § 20.104(a), to disclose in a written, signed statement, either: (1) That the individual had no prior occupational dose during the current calendar quarter, or (2) the nature and amount of any occupational dose which the individual may have received during that specifically identified current calendar quarter from sources of radiation possessed or controlled by other persons. Each licensee shall maintain records of such statements until the Commission authorizes their disposition.

(b) Before permitting, pursuant to 20.101(b), any individual in a restricted area to receive an occupational radiation dose in excess of the standards specified in § 20.101(a), each licensee shall:

(1) Obtain a certificate on Form NRC-4, or on a clear and legible record containing all the information required in that form, signed by the individual showing each period of time after the individual attained the age of 18 in which the individual received an occupational dose of radiation; and

(2) Calculate on Form NRC-4 in accordance with the instructions appearing therein, or on a clear and legible record containing all the information required in that form, the previously accumulated occupational dose received by the individual and the additional dose allowed for that individual under § 20.101(b).

(c)(1) In the preparation of Form NRC-4, or a clear and legible record containing all the information required in that form, the licensee shall make a reasonable effort to obtain reports of the individual's previously accumulated occupational dose. For each period for which the licensee obtains such reports, the licensee shall use the dose shown in the report in preparing the form. In any case where a licensee is unable to obtain reports of the individual's occupational dose for a previous complete calendar quarter, it shall be assumed that the individual has received the occupational dose specified in whichever of the following columns apply:

Part of body	Column 1—Assumed exposure in rems for calendar quarters prior to Jan. 1, 1961	Column 2—Assumed exposure in rems for calendar quarters beginning on or after Jan. 1, 1961
Whole body, gonads, active blood-forming organs, head and trunk, lens of eye	3¾	1¼

(2) The licensee shall retain and preserve records used in preparing Form NRC-4 until the Commission authorizes their disposition.

If calculation of the individual's accumulated occupational dose for all periods prior to January 1, 1961 yields a result higher than the applicable accumulated dose value for the individual as of that date, as specified in paragraph (b) of § 20.101, the excess may be disregarded.

[25 FR 10914, Nov. 17, 1960, as amended at 41 FR 18301, May 3, 1976; 44 FR 32352, June 6, 1979]

§ 20.103 Exposure of individuals to concentrations of radioactive materials in air in restricted areas.

(a)(1) No licensee shall possess, use, or transfer licensed material in such a manner as to permit any individual in a restricted area to inhale a quantity of radioactive material in any period of one calendar quarter greater than the quantity which would result from inhalation for 40 hours per week for 13 weeks at uniform concentrations of radioactive material in air specified in Appendix B, Table I, Column 1.[1, 2, 3] If the radioactive material is of such form that intake by absorption through the skin is likely, individual exposures to radioactive material shall be controlled so that the uptake of radioactive material by any organ from either inhalation or absorption or both routes of intake[4, 5] in any calendar quarter does not exceed that which would result from inhaling such radioactive material for 40 hours per week for 13 weeks at uniform concentrations specified in Appendix B, Table I, Column 1.

(2) No licensee shall possess, use, or transfer mixtures of U-234, U-235, and U-238 in soluble form in such a manner as to permit any individual in a restricted area to inhale a quantity of such material in excess of the intake limits specified in Appendix B, Table I, Column 1 of this part. If such soluble uranium is of a form such that absorption through the skin is likely, individual exposures to such material shall be controlled so that the uptake of such material by any organ from either inhalation or absorption or both routes of intake[4] does not exceed that which would result from inhaling such material at the limits specified in Appendix B, Table I, Column 1 and footnote 4 thereto.

(3) For purposes of determining compliance with the requirements of this section the licensee shall use suitable measurements of concentrations of radioactive materials in air for detecting and evaluating airborne radioactivity in restricted areas and in addition, as appropriate, shall use measurements of radioactivity in the body, measurements of radioactivity excreted from the body, or any combination of such measurements as may be necessary for timely detection and assessment of individual intakes of radioactivity by exposed individuals. It is assumed that an individual inhales radioactive material at the airborne concentration in which he is present unless he uses respiratory protective equipment pursuant to paragraph (c) of this section. When assessment of a particular individual's intake of radioactive material is necessary, intakes less than those which would result from inhalation for 2 hours in any one day or for 10 hours in any one week at

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[1] Since the concentration specified for tritium oxide vapor assumes equal intakes by skin absorption and inhalation, the total intake permitted is twice that which would result from inhalation alone at the concentration specified for H 3 S in Appendix B, Table I, Column 1 for 40 hours per week for 13 weeks.

[2] For radon-222, the limiting quantity is that inhaled in a period of one calendar year. For radioactive materials designated "Sub" in the "Isotope" column of the table, the concentration value specified is based upon exposure to the material as an external radiation source. Individual exposures to these materials may be accounted for as part of the limitation on individual dose in § 20.101. These nuclides shall be subject to the precautionary procedures required by § 20.103(b)(1).

[3] Multiply the concentration values specified in Appendix B, Table I, Column 1, by 6.3×10^8 ml to obtain the quarterly quantity limit. Multiply the concentration value specified in Appendix B, Table I, Column 1, by 2.5×10^9 ml to obtain the annual quantity limit for Rn-222.

[4] Significant intake by ingestion or injection is presumed to occur only as a result of circumstances such as accident, inadvertence, poor procedure, or similar special conditions. Such intakes must be evaluated and accounted for by techniques and procedures as may be appropriate to the circumstances of the occurrence. Exposures so evaluated shall be included in determining whether the limitation on individual exposures in § 20.103(a)(1) has been exceeded.

[5] Regulatory guidance on assessment of individual intakes of radioactive material is given in Regulatory Guide 8.9, "Acceptable Concepts, Models, Equations and Assumptions for a Bioassay Program," single copies of which are available from the Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, upon written request.

uniform concentrations specified in Appendix B, Table I, Column 1 need not be included in such assessment, provided that for any assessment in excess of these amounts the entire amount is included.

(b)(1) The licensee shall, as a precautionary procedure, use process or other engineering controls, to the extent practicable, to limit concentrations of radioactive materials in air to levels below those which delimit an airborne radioactivity area as defined in § 20.203(d)(1)(ii).

(2) When it is impracticable to apply process or other engineering controls to limit concentrations of radioactive material in air below those defined in § 20.203(d)(1)(ii), other precautionary procedures, such as increased surveillance, limitation of working times, or provision of respiratory protective equipment, shall be used to maintain intake of radioactive material by any individual within any period of seven consecutive days as far below that intake of radioactive material which would result from inhalation of such material for 40 hours at the uniform concentrations specified in Appendix B, Table I, Column 1 as is reasonably achievable. Whenever the intake of radioactive material by any individual exceeds this 40-hour control measure, the licensee shall make such evaluations and take such actions as are necessary to assure against recurrence. The licensee shall maintain records of such occurrences, evaluations, and actions taken in a clear and readily identifiable form suitable for summary review and evaluation.

(c) When respiratory protective equipment is used to limit the inhalation of airborne radioactive material pursuant to paragraph (b)(2) of this section, the licensee shall use equipment that is certified or had certification extended by the National Institute for Occupational Safety and Health/Mine Safety and Health Administration (NIOSH/MSHA). The licensee may make allowance for this use of respiratory protective equipment in estimating exposures of individuals to this material provided that:

(1) The licensee selects respiratory protective equipment that provides a protection factor greater than the multiple by which peak concentrations of airborne radioactive materials in the working area are expected to exceed the values specified in Appendix B, Table I, Column 1 of this part. The equipment so selected shall be used so that the average concentration of radioactive material in the air that is inhaled during any period of uninterrupted use in an airborne radioactivity area, on any day, by any individual using the equipment, does not exceed the values specified in Appendix B, Table I, Column 1 of this part. For the purposes of this paragraph, the concentration of radioactive material in the air that is inhaled when respirators are worn may be estimated by dividing the ambient concentration in air by the protection factor specified in Appendix A of this part. If the exposure is later found to be greater than estimated, the corrected value shall be used; if the exposure is later found to be less than estimated, the corrected value may be used.

(2) The licensee maintains and implements a respiratory protection program that includes, as a minimum: air sampling sufficient to identify the hazard, permit proper equipment selection and estimate exposures; surveys and bioassays as appropriate to evaluate actual exposures; written procedures regarding selection, fitting, and maintenance of respirators, and testing of respirators for operability immediately prior to each use; written procedures regarding supervision and training of personnel and issuance records; and determination by a physician prior to initial use of respirators, and at least every 12 months thereafter, that the individual user is physically able to use the respiratory protective equipment.

(3) A written policy statement on respirator usage shall be issued covering such things as: use of practicable engineering controls instead of respirators; routine, nonroutine, and emergency use of respirators; and periods of respirator use and relief from respirator use. The licensee shall advise each respirator user that the user may leave the area at any time for relief from respirator use in the event of equipment malfunction, physical or psychological distress, procedural or

communication failure, significant deterioration of operating conditions, or any other condition that might require such relief.

(4) The licensee uses equipment within limitations for type and mode of use and provides proper visual, communication, and other special capabilities (such as adequate skin protection) when needed.

(d) Unless otherwise authorized by the Commission, the licensee shall not assign protection factors in excess of those specified in Appendix A of this part in selecting and using respiratory protective equipment. The Commission may authorize a licensee to use higher protection factors on receipt of an application (1) describing the situation for which a need exists for higher protection factors, and (2) demonstrating that the respiratory protective equipment will provide these higher protection factors under the proposed conditions of use.

(e) Where equipment of a particular type has not been tested and certified, or had certification extended, by NIOSH/MSHA, or where there is no existing schedule for test and certification of certain equipment, the licensee shall not make allowance for this equipment without specific authorization by the Commission. An application for this authorization must include a demonstration by testing, or on the basis of reliable test information, that the material and performance characteristics of the equipment are capable of providing the proposed degree of protection under anticipated conditions of use.

(f) Only equipment that has been specifically certified or had certification extended for emergency use by NIOSH/MSHA shall be used as emergency devices.

(g) The licensee shall notify, in writing, the Regional Administrator of the appropriate Nuclear Regulatory Commission Regional Office listed in Appendix D at least 30 days before the date that respiratory protective equipment is first used under the provisions of this section.

[41 FR 52301, Nov. 29, 1976, as amended at 43 FR 29270, July 7, 1978; 47 FR 16164, Apr. 15, 1982; 52 FR 31610, Aug. 21, 1987; 53 FR 17689, May 18, 1988]

§ 20.104 Exposure of minors.

(a) No licensee shall possess, use, or transfer licensed material in such a manner as to cause any individual within a restricted area who is under 18 years of age, to receive in any period of one calendar quarter from radioactive material and other sources of radiation in the licensee's possession a dose in excess of 10 percent of the limits specified in the table in paragraph (a) of § 20.101.

(b) No licensee shall possess, use or transfer licensed material in such a manner as to cause any individual within a restricted area, who is under 18 years of age to be exposed to airborne radioactive material possessed by the licensee in an average concentration in excess of the limits specified in Appendix B, Table II of this part. For purposes of this paragraph, concentrations may be averaged over periods not greater than a week.

(c) The provisions of §§ 20.103(b)(2) and 20.103(c) shall apply to exposures subject to paragraph (b) of this section except that the references in §§ 20.103(b)(2) and 20.103(c) to Appendix B, Table I, Column 1 shall be deemed to be references to Appendix B, Table II, Column 1.

[25 FR 10914, Nov. 17, 1960, as amended at 41 FR 52302, Nov. 29, 1976]

§ 20.105 Permissible levels of radiation in unrestricted areas.

(a) There may be included in any application for a license or for amendment of a license proposed limits upon levels of radiation in unrestricted areas resulting from the applicant's possession or use of radioactive material and other sources of radiation. Such applications should include information as to anticipated average radiation levels and anticipated occupancy times for each unrestricted area involved. The Commission will approve the proposed limits if the applicant demonstrates that the proposed limits are not likely to cause any individual to receive a dose to the whole body in any period of one calendar year in excess of 0.5 rem.

(b) Except as authorized by the Commission pursuant to paragraph (a) of this section, no licensee shall posess, use or transfer licensed material in such a manner as to create in any unrestricted area from radioactive material and other sources of radiation in his possession:

(1) Radiation levels which, if an individual were continuously present in the area, could result in his receiving a dose in excess of two millirems in any one hour, or

(2) Radiation levels which, if an individual were continuously present in the area, could result in his receiving a dose in excess of 100 millirems in any seven consecutive days.

(c) In addition to other requirements of this part, licensees engaged in uranium fuel cycle operations subject to the provisions of 40 CFR Part 190, "Environmental Radiation Protection Standards for Nuclear Power Operations," shall comply with that part.

[25 FR 10914, Nov. 17, 1960, and 46 FR 18526, Mar. 25, 1981]

§ 20.106 Radioactivity in effluents to unrestricted areas.

(a) A licensee shall not possess, use, or transfer licensed material so as to release to an unrestricted area radioactive material in concentrations which exceed the limits specified in Appendix B, Table II of this part, except as authorized pursuant to § 20.302 or paragraph (b) of this section. For purposes of this section concentrations may be averaged over a period not greater than one year.

(b) An application for a license or amendment may include proposed limits higher than those specified in paragraph (a) of this section. The Commission will approve the proposed limits if the applicant demonstrates:

(1) That the applicant has made a reasonable effort to minimize the radioactivity contained in effluents to unrestricted areas; and

(2) That it is not likely that radioactive material discharged in the effluent would result in the exposure of an individual to concentrations of radioactive material in air or water exceeding the limits specified in Appendix B, Table II of this part.

(c) An application for higher limits pursuant to paragraph (b) of this section shall include information demonstrating that the applicant has made a reasonable effort to minimize the radioactivity discharged in effluents to unrestricted areas, and shall include, as pertinent:

(1) Information as to flow rates, total volume of effluent, peak concentration of each radionuclide in the effluent, and concentration of each radionuclide in the effluent averaged over a period of one year at the point where the effluent leaves a stack, tube, pipe, or similar conduit;

(2) A description of the properties of the effluents, including:

(i) Chemical composition;

(ii) Physical characteristics, including suspended solids content in liquid effluents, and nature of gas or aerosol for air effluents;

(iii) The hydrogen ion concentrations (p^H) of liquid effluents; and

(iv) The size range of particulates in effluents released into air.

(3) A description of the anticipated human occupancy in the unrestricted area where the highest concentration of radioactive material from the effluent is expected, and, in the case of a river or stream, a description of water uses downstream from the point of release of the effluent.

(4) Information as to the highest concentration of each radionuclide in an unrestricted area, including anticipated concentrations averaged over a period of one year:

(i) In air at any point of human occupancy; or

(ii) In water at points of use downstream from the point of release of the effluent.

(5) The background concentration of radionuclides in the receiving river or stream prior to the release of liquid effluent.

(6) A description of the environmental monitoring equipment, including sensitivity of the system, and procedures and calculations to determine concentrations of radionuclides in the unrestricted area and possible reconcentrations of radionuclides.

(7) A description of the waste treatment facilities and procedures used to reduce the concentration of radionuclides in effluents prior to their release.

(d) For the purposes of this section the concentration limits in Appendix

B, Table II of this part shall apply at the boundary of the restricted area. The concentration of radioactive material discharged through a stack, pipe or similar conduit may be determined with respect to the point where the material leaves the conduit. If the conduit discharges within the restricted area, the concentration at the boundary may be determined by applying appropriate factors for dilution, dispersion, or decay between the point of discharge and the boundary.

(e) In addition to limiting concentrations in effluent streams, the Commission may limit quantities of radioactive materials released in air or water during a specified period of time if it appears that the daily intake of radioactive material from air, water, or food by a suitable sample of an exposed population group, averaged over a period not exceeding one year, would otherwise exceed the daily intake resulting from continuous exposure to air or water containing one-third the concentration of radioactive materials specified in Appendix B, Table II of this part.

(f) The provisions of paragraphs (a) through (e) of this section do not apply to disposal of radioactive material into sanitary sewerage systems, which is governed by § 20.303.

(g) In addition to other requirements of this part, licensees engaged in uranium fuel cycle operations subject to the provisions of 40 CFR Part 190, "Environmental Radiation Protection Standard for Nuclear Power Operations," shall comply with that part.

(Secs. 161b., 161o., Pub. L. 83-703, 68 Stat. 948, 950 (42 U.S.C. 2201); sec. 201, as amended, Pub. L. 93-438, 88 Stat. 1243, Pub. L. 94-79, 89 Stat. 413, (42 U.S.C. 5841); Memorandum of Understanding between the Environmental Protection Agency and the Atomic Energy Commission, August 1973, 38 FR 24936, September 11, 1973)

[29 FR 14434, Oct. 21, 1964, as amended at 46 FR 18526, Mar. 25, 1981]

§ 20.107 Medical diagnosis and therapy.

Nothing in the regulations in this part shall be interpreted as limiting the intentional exposure of patients to radiation for the purpose of medical diagnosis or medical therapy.

§ 20.108 Orders requiring furnishing of bio-assay services.

Where necessary or desirable in order to aid in determining the extent of an individual's exposure to concentrations of radioactive material, the Commission may incorporate appropriate provisions in any license, directing the licensee to make available to the individual appropriate bio-assay services and to furnish a copy of the reports of such services to the Commission.

PRECAUTIONARY PROCEDURES

§ 20.201 Surveys.

(a) As used in the regulations in this part, "survey" means an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials or other sources of radiation under a specific set of conditions. When appropriate, such evaluation includes a physical survey of the location of materials and equipment, and measurements of levels of radiation or concentrations of radioactive material present.

(b) Each licensee shall make or cause to be made such surveys as (1) may be necessary for the licensee to comply with the regulations in this part, and (2) are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present.

[25 FR 10914, Nov. 17, 1960, as amended at 46 FR 53648, Oct. 30, 1981]

§ 20.202 Personnel monitoring.

(a) Each licensee shall supply appropriate personnel monitoring equipment to, and shall require the use of such equipment by:

(1) Each individual who enters a restricted area under such circumstances that he receives, or is likely to receive, a dose in any calendar quarter in excess of 25 percent of the applicable value specified in paragraph (a) of § 20.101.

(2) Each individual under 18 years of age who enters a restricted area under such circumstances that he receives or is likely to receive, a dose in any calendar quarter in excess of 5 percent of

the applicable value specified in paragraph (a) of § 20.101.

(3) Each individual who enters a high radiation area.

(b) As used in this part,

(1) "Personnel monitoring equipment" means devices designed to be worn or carried by an individual for the purpose of measuring the dose received (e.g., film badges, pocket chambers, pocket dosimeters, film rings, etc.);

(2) "Radiation area" means any area, accessible to personnel, in which there exists radiation, originating in whole or in part within licensed material, at such levels that a major portion of the body could receive in any one hour a dose in excess of 5 millirem, or in any 5 consecutive days a dose in excess of 100 millirems;

(3) "High radiation area" means any area, accessible to personnel, in which there exists radiation originating in whole or in part within licensed material at such levels that a major portion of the body could receive in any one hour a dose in excess of 100 millirem.

(c) All personnel dosimeters (except for direct and indirect reading pocket ionization chambers and those dosimeters used to measure the dose to hands and forearms, feet and ankles) that require processing to determine the radiation dose and that are utilized by licensees to comply with paragraph (a) of this section, with other applicable provisions of 10 CFR Chapter I, or with conditions specified in a licensee's license must be processed and evaluated by a dosimetry processor:

(1) Holding current personnel dosimetry accreditation from the National Voluntary Laboratory Accreditation Program (NVLAP) of the National Bureau of Standards, and

(2) Approved in this accreditation process for the type of radiation or radiations included in the NVLAP program that most closely approximate the type of radiation or radiations for which the individual wearing the dosimeter is monitored.

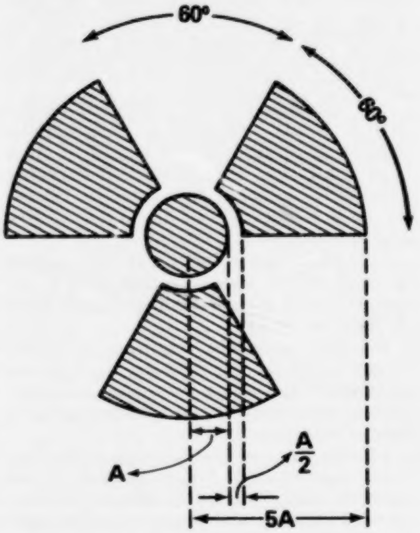
[25 FR 10914, Nov. 17, 1960, as amended at 52 FR 4604, Feb. 13, 1987]

§ 20.203 Caution signs, labels, signals and controls.

(a) *General.* (1) Except as otherwise authorized by the Commission, symbols prescribed by this section shall use the conventional radiation caution colors (magenta or purple on yellow background). The symbol prescribed by this section is the conventional three-bladded design:

RADIATION SYMBOL

1. Cross-hatched area is to be magenta or purple.
2. Background is to be yellow.



(2) In addition to the contents of signs and labels prescribed in this section, licensees may provide on or near such signs and labels any additional information which may be appropriate in aiding individuals to minimize exposure to radiation or to radioactive material.

(b) *Radiation areas.* Each radiation area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words:

CAUTION [1]

RADIATION AREA

(c) *High radiation areas.* (1) Each high radiation area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words:

CAUTION [1]

HIGH RADIATION AREA

(2) Each entrance or access point to a high radiation area shall be:

(i) Equipped with a control device which shall cause the level of radiation to be reduced below that at which an individual might receive a dose of 100 millirems in 1 hour upon entry into the area; or

(ii) Equipped with a control device which shall energize a conspicuous visible or audible alarm signal in such a manner that the individual entering the high radiation area and the licensee or a supervisor of the activity are made aware of the entry; or

(iii) Maintained locked except during periods when access to the area is required, with positive control over each individual entry.

(3) The controls required by paragraph (c)(2) of this section shall be established in such a way that no individual will be prevented from leaving a high radiation area.

(4) In the case of a high radiation area established for a period of 30 days or less, direct surveillance to prevent unauthorized entry may be substituted for the controls required by paragraph (c)(2) of this section.

(5) Any licensee, or applicant for a license, may apply to the Commission for approval of methods not included in paragraphs (c)(2) and (4) of this section for controlling access to high radiation areas. The Commission will approve the proposed alternatives if the licensee or applicant demonstrates that the alternative methods of control will prevent unauthorized entry into a high radiation area, and that the requirement of paragraph (c)(3) of this section is met.

(6) Each area in which there may exist radiation levels in excess of 500 rems in one hour at one meter from a sealed radio-active source [1a] that is used to irradiate materials shall: [2]

(i) Have each entrance or access point equipped with entry control devices which shall function automatically to prevent any individual from inadvertently entering the area when such radiation levels exist; permit deliberate entry into the area only after a control device is actuated that shall cause the radiation level within the area, from the sealed source, to be reduced below that at which it would be possible for an individual to receive a dose in excess of 100 mrem in one hour; and prevent operation of the source if the source would produce radiation levels in the area that could result in a dose to an individual in excess of 100 mrem in one hour. The entry control devices required by this paragraph (c)(6) shall be established in such a way that no individual will be prevented from leaving the area.

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[1] Or "Danger".

[1a] This paragraph (c)(6) does not apply to radioactive sources that are used in teletherapy, in radiography, or in completely self-shielded irradiators in which the source is both stored and operated within the same shelding radiation barrier and, in the designed configuration of the irradiator, is always physically inaccessible to any individual and cannot create high levels of radiation in an area that is accessible to any individual. This paragraph (c)(6) also does not apply to sources from which the radiation is incidental to some other use nor to nuclear reactor generated radiation other than radiation from byproduct, source, or special nuclear materials that are used in sealed sources in non-self-shielded irradiators.

[2] These requirements apply after Mar. 14, 1978. Each person licensed to conduct activities to which this paragraph (c)(6) applies and who is not in compliance with the provisions of this paragraph on Mar. 14, 1978, shall file with the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, on or before June 14, 1978, information describing in detail the actions taken or to be taken to achieve compliance with this paragraph by Dec. 14, 1978, and may continue activities in conformance with present license conditions and the provisions of the previously effective § 20.2034 until such compliance is achieved. For such persons compliance must be achieved not later than Dec. 14, 1978.

(ii) Be equipped with additional control devices such that upon failure of the entry control devices to function as required by paragraph (c)(6)(i) of this section the radiation level within the area, from the sealed source, shall be reduced below that at which it would be possible for an individual to receive a dose in excess of 100 mrem in one hour; and visible and audible alarm signals shall be generated to make an individual attempting to enter the area aware of the hazard and the licensee or at least one other individual, who is familiar with the activity and prepared to render or summon assistance, aware of such failure of the entry control devices.

(iii) Be equipped with control devices such that upon failure or removal of physical radiation barriers other than the source's shielded storage container the radiation level from the source shall be reduced below that at which it would be possible for an individual to receive a dose in excess of 100 mrem in one hour; and visible and audible alarm signals shall be generated to make potentially affected individuals aware of the hazard and the licensee or at least one other individual, who is familiar with the activity and prepared to render or summon assistance, aware of the failure or removal of the physical barrier. When the shield for the stored source is a liquid, means shall be provided to monitor the integrity of the shield and to signal, automatically, loss of adequate shielding. Physical radiation barriers that comprise permenent structural components, such as walls, that have no credible probability of failure or removal in ordinary circumstances need not meet the requirements of this paragraph (c)(6)(iii).

(iv) Be equipped with devices that will automatically generate visible and audible alarm signals to alert personnel in the area before the source can be put into operation and in sufficient time for any individual in the area to operate a clearly identified control device which shall be installed in the area and which can prevent the source from being put into operation.

(v) Be controlled by use of such administrative procedure and such devices as are necessary to assure that the area is cleared of personnel prior to each use of the source preceding which use it might have been possible for an individual to have entered the area.

(vi) Be checked by a physical radiation measurement to assure that prior to the first individual's entry into the area after any use of the source, the radiation level from the source in the area is below that at which it would be possible for an individual to receive a dose in excess of 100 mrem in one hour.

(vii) Have entry control devices required in paragraph (c)(6)(i) of this section which have been tested for proper functioning prior to initial operation with such source of radiation on any day that operations are not uninterruptedly continued from the previous day or before resuming operations after any unintended interruption, and for which records are kept of the dates, times, and results of such tests of function. No operations other than those necessary to place the source in safe condition or to effect reparis on controls shall be conducted with such source unless control devices are functioning properly. The licensee shall submit an acceptable schedule for more complete periodic tests of the entry control and warning systems to be established and adhered to as a condition of the license.

(viii) Have those entry and exit portals that are used in transporting materials to and from the irradiation area, and that are not intended for use by individuals, controlled by such devices and administrative procedures as are necessary to physically protect and warn against inadvertent entry by any individual through such portals. Exit portals for processed materials shall be equipped to detect and signal the presence of loose radiation sources that are carried toward such an exit and to automatically prevent such loose sources from being carried out of the area.

(7) Licensees with, or applicants for, licenses for radiation sources that are within the purview of paragraph (c)(6) of this section, and that must be used

in a variety of positions or in peculiar locations, such as open fields or forests, that make it impracticable to comply with certain requirements of paragraph (c)(6) of this section, such as those for the automatic control of radiation levels, may apply to the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, for approval, prior to use of safety measures that are alternative to those specified in paragraph (c)(6) of this section, and that will provide at least an equivalent degree of personnel protection in the use of such sources. At least one of the alternative measures must include an entry-preventing interlock control based on a physical measurement of radiation that assures the absence of high radiation levels before an individual can gain access to an area where such sources are used.

(d) *Airborne radioactivity areas.* (1) As used in the regulations in this part "airborne radioactivity area" means (i) any room, enclosure, or operating area in which airborne radioactive materials composed wholly or partly of licensed material, exist in concentrations in excess of the amounts specified in Appendix B, Table I, Column 1 of this part; or (ii) any room, enclosure, or operating area in which airborne radioactive material composed wholly or partly of licensed material exists in concentrations which, averaged over the number of hours in any week during which individuals are in the area, exceed 25 percent of the amounts specified in Appendix B Table I, Column 1 of this part.

(2) Each airborne radioactivity area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words:

CAUTION [1]

AIRBORNE RADIOACTIVITY AREA

(e) *Additional requirements.* (1) Each area or room in which licensed material is used or stored and which contains any radioactive material (other than natural uranium or thorium) in an amount exceeding 10 times the quantity of such material specified in Appendix C of this part shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words:

CAUTION [1]

RADIOACTIVE MATERIAL(S)

(2) Each area or room in which natural uranium or thorium is used or stored in any amount exceeding one hundred times the quantity specified in Appendix C of this part shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words:

CAUTION [1]

RADIOACTIVE MATERIAL(S)

(f) *Containers.* (1) Except as provided in paragraph (f)(3) of this section, each container of licensed material shall bear a durable, clearly visible label identifying the radioactive contents.

(2) A label required pursuant to paragraph (f)(1) of this section shall bear the radiation caution symbol and the words "CAUTION, RADIOACTIVE MATERIAL" or "DANGER, RADIOACTIVE MATERIAL". It shall also provide sufficient information [3] to permit individuals handling or using the containers, or working in the vicinity thereof, to take precautions to avoid or minimize exposures.

(3) Notwithstanding the provisions of paragraph (f)(1) of this section labeling is not required:

(i) For containers that do not contain licensed materials in quantities greater than the applicable quantities listed in Appendix C of this part.

(ii) For containers containing only natural uranium or thorium in quantities no greater than 10 times the applicable quantities listed in Appendix C of this part.

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[1] See footnote 1 to paragraph (b).

[1] See footnote 1 to paragraph (b).

[1] See footnote 1 to paragraph (b).

[3] As appropriate, the information will include radiation levels, kinds of material, estimate of activity, date for which activity is estimated, mass enrichment, etc.

(iii) For containers that do not contain licensed materials in concentrations greater than the applicable concentrations listed in Appendix B, Table I, Column 2, of this part.

(iv) For containers when they are attended by an individual who takes the precautions necessary to prevent the exposure of any individual to radiation or radioactive materials in excess of the limits established by the regulations in this part.

(v) For containers when they are in transport and packaged and labeled in accordance with regulations of the Department of Transportation.

(vi) For containers which are accessible[3] only to individuals authorized to handle or use them, or to work in the vicinity thereof, provided that the contents are identified to such individuals by a readily available written record.

(vii) For manufacturing or process equipment, such as nuclear reactors, reactor components, piping, and tanks.

(4) Each licensee shall, prior to disposal of an empty uncontaminated container to unrestricted areas, remove or deface the radioactive material label or otherwise clearly indicate that the container no longer contains radioactive materials.

[25 FR 10914, Nov. 17, 1960, as amended at 31 FR 10515, Aug. 5, 1966; 34 FR 19546, Dec. 11, 1969; 35 FR 5033, Mar. 25, 1970; 42 FR 64620, Dec. 27, 1977; 43 FR 2167, Jan. 16, 1978; 43 FR 22172, May 24, 1978]

§ 20.204 Same: Exceptions.

Notwithstanding the provisions of § 20.203,

(a) A room or area is not required to be posted with a caution sign because of the presence of a sealed source provided the radiation level twelve inches from the surface of the source container or housing does not exceed five millirem per hour.

(b) Rooms or other areas in hospitals are not required to be posted with caution signs, and control of entrance or access thereto pursuant to § 20.203(c) is not required, because of the presence of patients containing byproduct material provided that there are personnel in attendance who will take the precautions necessary to prevent the exposure of any individual to radiation or radioactive material in excess of the limits established in the regulations in this part.

(c) Caution signs are not required to be posted at areas or rooms containing radioactive materials for periods of less than eight hours provided that (1) the materials are constantly attended during such periods by an individual who shall take the precautions necessary to prevent the exposure of any individual to radiation or radioactive materials in excess of the limits established in the regulations in this part and; (2) such area or room is subject to the licensee's control.

(d) A room or other area is not required to be posted with a caution sign, and control is not required for each entrance or access point to a room or other area which is a high radiation area solely because of the presence of radioactive materials prepared for transport and packaged and labeled in accordance with regulations of the Department of Transportation.

[25 FR 10914, Nov. 17, 1960, as amended at 35 FR 5033, Mar. 25, 1970]

§ 20.205 Procedures for picking up, receiving, and opening packages.

(a)(1) Each licensee who expects to receive a package containing quantities of radioactive material in excess of the Type A quantities specified in paragraph (b) of this section shall:

(i) If the package is to be delivered to the licensee's facility by the carrier, make arrangements to receive the package when it is offered for delivery by the carrier; or

(ii) If the package is to be picked up by the licensee at the carrier's terminal, make arrangements to receive notification from the carrier of the arrival of the package, at the time of arrival.

(2) Each licensee who picks up a package of radioactive material from a carrier's terminal shall pick up the package expeditiously upon receipt of notification from the carrier of its arrival.

(b)(1) Each licensee, upon receipt of a package of radioactive material, shall monitor the external surfaces of the package for radioactive contamination caused by leakage of the radioactive contents, except:

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[3] For example, containers in locations such as water-filled canals, storage vaults, or hot cells.

(i) Packages containing no more than the exempt quantity specified in the table in this paragraph;

(ii) Packages containing no more than 10 millicuries of radioactive material consisting solely of tritium, carbon-14, sulfur-35, or iodine-125;

(iii) Packages containing only radioactive material as gases or in special form;

(iv) Packages containing only radioactive material in other than liquid form (including Mo-99/Tc-99m generators) and not exceeding the Type A quantity limit specified in the table in this paragraph; and

(v) Packages containing only radionuclides with half-lives of less than 30 days and a total quantity of no more than 100 millicuries.

The monitoring shall be performed as soon as practicable after receipt, but no later than three hours after the package is received at the licensee's facility if received during the licensee's normal working hours, or eighteen hours if received after normal working hours.

(2) If removable radioactive contamination in excess of 0.01 microcuries (22,000 disintegrations per minute) per 100 square centimeters of package surface is found on the external surfaces of the package, the licensee shall immediately notify the final delivering carrier and, by telephone and telegraph, mailgram or facsimile, the appropriate Nuclear Regulatory Commission Regional Office shown in Appendix D of this part.

TABLE OF EXEMPT AND TYPE A QUANTITIES

Transport group	Exempt quantity limit (in millicuries)	Type A quantity limit (in curies)
I	.01	0.001
II	0.1	0.050
III	1	3
IV	1	20
V	1	20
VI	1	1000
VII	25,000	1000
Special Form	1	20

(c)(1) Each licensee, upon receipt of a package containing quantities of radioactive material in excess of the Type A quantities specified in paragraph (b) of this section, other than those transported by exclusive use vehicle, shall monitor the radiation levels external to the package. The package shall be monitored as soon as practicable after receipt, but no later than three hours after the package is received at the licensee's facility if received during the licensee's normal working hours, or 18 hours if received after normal working hours.

(2) If radiation levels are found on the external surface of the package in excess of 200 millirem per hour, or at three feet from the external surface of the package in excess of 10 millirem per hour, the licensee shall immediately notify by telephone and telegraph mailgram, or facsimile, the director of the appropriate NRC Regional Office listed in Appendix D, and the final delivering carrier.

(d) Each licensee shall establish and maintain procedures for safely opening packages in which licensed material is received, and shall assure that such procedures are followed and that due consideration is given to special instructions for the type of package being opened.

[39 FR 17974, May 22, 1974, as amended at 41 FR 16445, Apr. 19, 1976; 49 FR 19624, May 9, 1984]

§ 20.206 Instruction of personnel.

Instructions required for individuals working in or frequenting any portion of a restricted area are specified in § 19.12 of this chapter.

[38 FR 22220, Aug. 17, 1973]

§ 20.207 Storage and control of licensed materials in unrestricted areas.

(a) Licensed materials stored in an unrestricted area shall be secured from unauthorized removal from the place of storage.

(b) Licensed materials in an unrestricted area and not in storage shall be tended under the constant surveillance and immediate control of the licensee.

[40 FR 26679, June 25, 1975]

WASTE DISPOSAL

20.301 General requirement.

No licensee shall dispose of licensed material except:

(a) By transfer to an authorized recipient as provided in the regulations n Parts 30, 40, 60, 61, 70 or 72 of this chapter, whichever may be applicable; or

(b) As authorized pursuant to § 20.302 or Part 61 of this chapter; or

(c) As provided in § 20.303, applicable to the disposal of licensed material by release into sanitary sewerage systems, or in § 20.306 for disposal of specific wastes, or in § 20.106 (Radioactivity in effluents to unrestricted areas).

[25 FR 10914, Nov. 17, 1960, as amended at 46 FR 16234, Mar. 11, 1981; 46 FR 58282, Dec. 1, 1981; 47 FR 57479, Dec. 27, 1982]

§ 20.302 Method for obtaining approval of proposed disposal procedures.

(a) Any licensee or applicant for a license may apply to the Commission for approval of proposed procedures to dispose of licensed material in a manner not otherwise authorized in the regulations in this chapter. Each application should include a description of the licensed material and any other radioactive material involved, including the quantities and kinds of such material and the levels of radioactivity involved, and the proposed manner and conditions of disposal. The application should also include an analysis and evaluation of pertinent information as to the nature of the environment, including topographical, geological, meteorological, and hydrological characteristics; usage of ground and surface waters in the general area; the nature and location of other potentially affected facilities; and procedures to be observed to minimize the risk of unexpected or hazardous exposures.

(b) The Commission will not approve any application for a license for disposal of licensed material at sea unless the applicant shows that sea disposal offers less harm to man or the environment than other practical alternative methods of disposal.

[25 FR 10914, Nov. 17, 1960, as amended at 26 FR 352, Jan. 18, 1961; 36 FR 23138, Dec. 4, 1971; 47 FR 57479, Dec. 27, 1982]

§ 20.303 Disposal by release into sanitary sewerage systems.

No licensee shall discharge licensed material into a sanitary sewerage system unless:

(a) It is readily soluble or dispersible in water; and

(b) The quantity of any licensed or other radioactive material released into the system by the licensee in any one day does not exceed the larger of paragraphs (b)(1) or (2) of this section.

(1) The quantity which, if diluted by the average daily quantity of sewage released into the sewer by the licensee, will result in an average concentration equal to the limits specified in Appendix B, Table I, Column 2 of this part; or

(2) Ten times the quantity of such material specified in Appendix C of this part; and

(c) The quantity of any licensed or other radioactive material released in any one month, if diluted by the average monthly quantity of water released by the licensee, will not result in an average concentration exceeding the limits specified in Appendix B, Table I, Column 2 of this part; and

(d) The gross quantity of licensed and other radioactive material, excluding hydrogen-3 and carbon-14, released into the sewerage system by the licensee does not exceed one curie per year. The quantities of hydrogen-3 and carbon-14 released into the sanitary sewerage system may not exceed 5 curies per year for hydrogen-3 and 1 curie per year for carbon-14. Excreta from individuals undergoing medical diagnosis or therapy with radioactive material shall be exempt from any limitations contained in this section.

[25 FR 10914, Nov. 17, 1960, as amended at 46 FR 16234, Mar. 11, 1981]

§ 20.305 Treatment or disposal by incineration.

No licensee shall treat or dispose of licensed material by incineration except for materials listed under § 20.306 or as specifically approved by the Commission pursuant to §§ 20.106(b) and 20.302.

[46 FR 16234, Mar. 11, 1981]

§ 20.306 Disposal of specific wastes.

Any licensee may dispose of the following licensed material without regard to its radioactivity:

(a) 0.05 microcuries or less of hydrogen-3 or carbon-14, per gram of medium, used for liquid scintillation counting; and

(b) 0.05 microcuries or less of hydrogen-3 or carbon-14, per gram of animal tissue averaged over the weight of the entire animal; provided however, tissue may not be disposed of under this section in a manner that would permit its use either as food for humans or as animal feed.

(c) Nothing in this section, however, relieves the licensee of maintaining records showing the receipt, transfer and disposal of such byproduct material as specified in § 30.51 of this chapter; and

(d) Nothing in this section relieves the licensee from complying with other applicable Federal, State and local regulations governing any other toxic or hazardous property of these materials.

[46 FR 16234, Mar. 11, 1981]

§ 20.311 Transfer for disposal and manifests.

(a) *Purpose.* The requirements of this section are designed to control transfers of radioactive waste intended for disposal at a land disposal facility and establish a manifest tracking system and supplement existing requirements concerning transfers and recordkeeping for such wastes. The reporting and recordkeeping requirements contained in this section have been approved by the Office of Management and Budget; OMB approval No. 3150-0014.

(b) Each shipment of radioactive waste to a licensed land disposal facility must be accompanied by a shipment manifest that contains the name, address, and telephone number of the person generating the waste. The manifest shall also include the name, address, and telephone number or the name and EPA hazardous waste identification number of the person transporting the waste to the land disposal facility. The manifest must also indicate as completely as practicable: a physical description of the waste; the volume; radionuclide identity and quantity; the total radioactivity; and the principal chemical form. The solidification agent must be specified. Waste containing more than 0.1% chelating agents by weight must be identified and the weight percentage of the chelating agent estimated. Wastes classified as Class A, Class B, or Class C in § 61.55 of this chapter must be clearly identified as such in the manifest. The total quantity of the radionuclides H-3, C-14, Tc-99 and I-129 must be shown. The manifest required by this paragraph may be shipping papers used to meet Department of Transportation or Environmental Protection Agency regulations or requirements of the receiver, provided all the required information is included. Copies of manifests required by this section may be legible carbon copies or legible photocopies.

(c) Each manifest must include a certification by the waste generator that the transported materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the Commission. An authorized representative of the waste generator shall sign and date the manifest.

(d) Any generating licensee who transfers radioactive waste to a land disposal facility or a licensed waste collector shall comply with the requirements in paragraphs (d)(1) through (8) of this section. Any generating licensee who transfers waste to a licensed waste processor who treats or repackages waste shall comply with the requirements of paragraphs (d)(4) through (8) of this section. A licensee shall:

(1) Prepare all wastes so that the waste is classified according to § 61.55 and meets the waste characteristics requirements in § 61.56 of this chapter;

(2) Label each package of waste to identify whether it is Class A waste, Class B waste, or Class C waste, in accordance with § 61.55 of this chapter;

(3) Conduct a quality control program to assure compliance with §§ 61.55 and 61.56 of this chapter; the

program must include management evaluation of audits;

(4) Prepare shipping manifests to meet the requirements of §§ 20.311 (b) and (c) of this part;

(5) Forward a copy of the manifest to the intended recipient, at the time of shipment; or, deliver to a collector at the time the waste is collected, obtaining acknowledgement of receipt in the form of a signed copy of the manifest or equivalent documentation from the collector;

(6) Include one copy of the manifest with the shipment;

(7) Retain a copy of the manifest and documentation of acknowledgement of receipt as the record of transfer of licensed material as required by Parts 30, 40, and 70 of this chapter; and,

(8) For any shipments or any part of a shipment for which acknowledgement of receipt has not been received within the times set forth in this section, conduct an investigation in accordance with paragraph (h) of this section.

(e) Any waste collector licensee who handles only prepackaged waste shall:

(1) Acknowledge receipt of the waste from the generator within one week of receipt by returning a signed copy of the manifest or equivalent documentation;

(2) Prepare a new manifest to reflect consolidated shipments; the new manifest shall serve as a listing or index for the detailed generator manifests. Copies of the generator manifests shall be a part of the new manifest. The waste collector may prepare a new manifest without attaching the generator manifests, provided the new manifest contains for each package the information specified in paragraph (b) of this section. The collector licensee shall certify that nothing has been done to the waste which would invalidate the generator's certification;

(3) Forward a copy of the new manifest to the land disposal facility operator at the time of shipment;

(4) Include the new manifest with the shipment to the disposal site;

(5) Retain a copy of the manifest and documentation of acknowledgement of receipt as the record of transfer of licensed material as required by Parts 30, 40, and 70 of this chapter, and retain information from generator manifests until disposition is authorized by the Commission; and,

(6) For any shipments or any part of a shipment for which acknowledgement of receipt is not received within the times set forth in this section, conduct an investigation in accordance with paragraph (h) of this section.

(f) Any licensed waste processor who treats or repackages wastes shall:

(1) Acknowledge receipt of the waste from the generator within one week of receipt by returning a signed copy of the manifest or equivalent documentation;

(2) Prepare a new manifest that meets the requirements of paragraphs (b) and (c) of this section. Preparation of the new manifest reflects that the processor is responsible for the waste;

(3) Prepare all wastes so that the waste is classified according to § 61.55 and meets the waste characteristics requirements in § 61.56 of this chapter;

(4) Label each package of waste to identify whether it is Class A waste, Class B waste, or Class C waste, in accordance with §§ 61.55 and 61.57 of this chapter;

(5) Conduct a quality control program to assure compliance with §§ 61.55 and 61.56 of this chapter. The program shall include management evaluation of audits;

(6) Forward a copy of the new manifest to the disposal site operator or waste collector at the time of shipment, or deliver to a collector at the time the waste is collected, obtaining acknowledgement of receipt in the form of a signed copy of the manifest or equivalent documentation by the collector;

(7) Include the new manifest with the shipment;

(8) Retain copies of original manifests and new manifests and documentation of acknowledgement of receipt as the record of transfer of licensed material required by Parts 30, 40, and 70 of this chapter; and

(9) For any shipment or part of a shipment for which acknowledgement is not received within the times set forth in this section, conduct an investigation in accordance with paragraph (h) of this section.

(g) The land disposal facility operator shall:

(1) Acknowledge receipt of the waste within one week of receipt by returning a signed copy of the manifest or equivalent documentation to the shipper. The shipper to be notified is the licensee who last possessed the waste and transferred the waste to the operator. The returned copy of the manifest or equivalent documentation shall indicate any discrepancies between materials listed on the manifest and materials received;

(2) Maintain copies of all completed manifests or equivalent documentation until the Commission authorizes their disposition; and

(3) Notify the shipper (i.e., the generator, the collector, or processor) and the Regional Administrator of the nearest Commission Regional Office listed in Appendix D of this part when any shipment or part of a shipment has not arrived within 60 days after the advance manifest was received.

(h) Any shipment or part of a shipment for which acknowledgement is not received within the times set forth in this section, must:

(1) Be investigated by the shipper if the shipper has not received notification of receipt within 20 days after transfer; and

(2) Be traced and reported. The investigation shall include tracing the shipment and filing a report with the nearest Commission Regional Office listed in Appendix D of this part. Each licensee who conducts a trace investigation shall file a written report with the nearest Commission's Regional office within 2 weeks of completion of the investigation.

[47 FR 57479, Dec. 27, 1982, as amended at 53 FR 17689, May 18, 1988]

RECORDS, REPORTS, AND NOTIFICATION

§ 20.401 Records of surveys, radiation monitoring, and disposal.

(a) Each licensee shall maintain records showing the radiation exposures of all individuals for whom personnel monitoring is required under § 20.202 of the regulations in this part. Such records shall be kept on Form NRC-5, in accordance with the instructions contained in that form or on clear and legible records containing all the information required by Form NRC-5. The doses entered on the forms or records shall be for periods of time not exceeding one calendar quarter.

(b) Each licensee shall maintain records in the same units used in this part, showing the results of surveys required by § 20.201(b), monitoring required by §§ 20.205(b) and 20.205(c), and disposals made under §§ 20.302, 20.303, removed § 20.304,[1] and Part 61 of this chapter.

(c)(1) Records of individual exposure to radiation and to radioactive material which must be maintained pursuant to the provisions of paragraph (a) of this section and records of bioassays, including results of whole body counting examinations, made pursuant to § 20.108, shall be preserved until the Commission authorizes disposition.

(2) Records of the results of surveys and monitoring which must be maintained pursuant to paragraph (b) of this section shall be preserved for two years after completion of the survey except that the following records shall be maintained until the Commission authorizes their disposition: (i) Records of the results of surveys to determine compliance with § 20.103(a); (ii) in the absence of personnel monitoring data, records of the results of surveys to determine external radiation dose; and (iii) records of the results of surveys used to evaluate the release of radioactive effluents to the environment.

(3) Records of disposal of licensed materials made pursuant to §§ 20.302, 20,303, removed § 20.304,[2] and Part 61 of this chapter are to be maintained until the Commission authorizes their disposition.

(4) Records which must be maintained pursuant to this part may be the original or a reproduced copy or microform if such reproduced copy or microform is duly authenticated by authorized personnel and the micro-

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[1] Section 20.304 provided for burial of small quantities of licensed materials in soil. Notice of its removal appears in the FEDERAL REGISTER of October 30, 1980 (45 FR 71762).

[2] See footnote 1 to paragraph (b) of this section.

form is capable of producing a clear and legible copy after storage for the period specified by Commission regulations.

(5) If there is a conflict between the Commission's regulations in this part, license condition, or technical specification, or other written Commission approval or authorization pertaining to the retention period for the same type of record, the retention period specified in the regulations in this part for such records shall apply unless the Commission pursuant to § 20.501, has granted a specific exemption from the record retention requirements specified in the regulations in this part.

[25 FR 10914, Nov. 17, 1960, as amended at 41 FR 18301, May 3, 1976; 47 FR 57480, Dec. 27, 1982]

§ 20.402 Reports of theft or loss of licensed material.

(a)(1) Each licensee shall report to the Commission, by telephone, immediately after it determines that a loss or theft of licensed material has occurred in such quantities and under such circumstances that it appears to the licensee that a substantial hazard may result to persons in unrestricted areas.

(2) Reports must be made as follows:

(i) Licensees having an installed Emergency Notification System shall make the reports to the NRC Operations Center in accordance with § 50.72 of this chapter.

(ii) All other licensees shall make reports to the Administrator of the appropriate NRC Regional Office listed in Appendix D of this part.

(b) Each licensee who makes a report under paragraph (a) of this section shall, within 30 days after learning of the loss or theft, make a report in writing to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, with a copy to the appropriate NRC Regional Office listed in Appendix D of this part. The report shall include the following information:

(1) A description of the licensed material involved, including kind, quantity, chemical, and physical form;

(2) A description of the circumstances under which the loss or theft occurred;

(3) A statement of disposition or probable disposition of the licensed material involved;

(4) Radiation exposures to individuals, circumstances under which the exposures occurred, and the extent of possible hazard to persons in unrestricted areas;

(5) Actions which have been taken, or will be taken, to recover the material; and

(6) Procedures or measures which have been or will be adopted to prevent a recurrence of the loss or theft of licensed material.

(c) Subsequent to filing the written report the licensee shall also report any substantive additional information on the loss or theft which becomes available to the licensee, within 30 days after he learns of such information.

(d) Any report filed with the Commission pursuant to this section shall be so prepared that names of individuals who may have received exposure to radiation are stated in a separate part of the report.

(e) For holders of an operating license for a nuclear power plant, the events included in paragraph (b) of this section must be reported in accordance with the procedures described in § 50.73 (b), (c), (d), (e), and (g) of this chapter and must include the information required in paragraph (b) of this section. Events reported in accordance with § 50.73 of this chapter need not be reported by a duplicate report under paragraph (b) of this section.

[34 FR 7500, May 9, 1969, as amended at 38 FR 1271, Jan. 11, 1973; 48 FR 33859, July 26, 1983]

§ 20.403 Notifications of incidents.

(a) *Immediate notification.* Each licensee shall immediately report any events involving byproduct, source, or special nuclear material possessed by the licensee that may have caused or threatens to cause:

(1) Exposure of the whole body of any individual to 25 rems or more of radiation; exposure of the skin of the

whole body of any individual of 150 rems or more or radiation; or exposure of the feet, ankles, hands or forearms of any individual to 375 rems or more of radiation; or

(2) The release of radioactive material in concentrations which, if averaged over a period of 24 hours, would exceed 5,000 times the limits specified for such materials in Appendix B, Table II of this part; or

(3) A loss of one working week or more of the operation of any facilities affected; or

(4) Damage to property in excess of $200,000.

(b) *Twenty-four hour notification.* Each licensee shall within 24 hours of discovery of the event, report any event involving licensed material possessed by the licensee that may have caused or threatens to cause:

(1) Exposure of the whole body of any individual to 5 rems or more of radiation; exposure of the skin of the whole body of any individual to 30 rems or more of radiation; or exposure of the feet, ankles, hands, or forearms to 75 rems or more of radiation; or

(2) The release of radioactive material in concentrations which, if averaged over a period of 24 hours, would exceed 500 times the limits specified for such materials in Appendix B, Table II of this part; or

(3) A loss of one day or more of the operation of any facilities affected; or

(4) Damage to property in excess of $2,000.

(c) Any report filed with the Commission pursuant to this section shall be prepared so that names of individuals who have received exposure to radiation will be stated in a separate part of the report.

(d) Reports made by licensees in response to the requirements of this section must be made as follows:

(1) Licensees that have an installed Emergency Notification System shall make the reports required by paragraphs (a) and (b) of this section to the NRC Operations Center in accordance with § 50.72 of this chapter.

(2) All other licensees shall make the reports required by paragraphs (a) and (b) of this section by telephone to the NRC Operations Center [1] and by telegram, mailgram, or facsimile to the Administrator of the appropriate NRC Regional Office listed in Appendix D of this part.

[27 FR 5905, June 22, 1962, as amended at 28 FR 6823, July 3, 1963; 42 FR 43965, Sept. 1, 1977; 43 FR 2719, Jan. 19, 1978; 48 FR 33859, July 26, 1983; 52 FR 33917, Sept. 9, 1987]

§ 20.404 [Reserved]

§ 20.405 Reports of overexposures and excessive levels and concentrations.

(a)(1) In addition to any notification required by § 20.403 of this part, each licensee shall make a report in writing concerning any one of the following types of incidents within 30 days of its occurrence:

(i) Each exposure of an individual to radiation in excess of the applicable limits in §§ 20.101 or 20.104(a) of this part, or the license;

(ii) Each exposure of an individual to radioactive material in excess of the applicable limits in §§ 20.103(a)(1), 20.103(a)(2), or § 20.104(b) of this part, or in the license;

(iii) Levels of radiation or concentrations of radioactive material in a restricted area in excess of any other applicable limit in the license;

(iv) Any incident for which notification is required by § 20.403 of this part; or

(v) Levels of radiation or concentrations of radioactive material (whether or not involving excessive exposure of any individual) in an unrestricted area in excess of ten times any applicable limit set forth in this part or in the license.

(2) Each report required under paragraph (a)(1) of this section must describe the extent of exposure of individuals to radiation or to radioactive material, including:

(i) Estimates of each individual's exposure as required by paragraph (b) of this section;

(ii) Levels of radiation and concentrations of radioactive material involved;

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[1] Commercial telephone number of the NRC Operations Center is (202) 951-0550.

(iii) The cause of the exposure, levels or concentrations; and

(iv) Corrective steps taken or planned to prevent a recurrence.

(b) Any report filed with the Commission pursuant to paragraph (a) of this section shall include for each individual exposed the name, social security number, and date of birth, and an estimate of the individual's exposure. The report shall be prepared so that this information is stated in a separate part of the report.

(c)(1) In addition to any notification required by § 20.403 of this part, each licensee shall make a report in writing of levels of radiation or releases of radioactive material in excess of limits specified by 40 CFR Part 190, "Environmental Radiation Protection Standards for Nuclear Power Operations," or in excess of license conditions related to compliance with 40 CFR Part 190.

(2) Each report submitted under paragraph (c)(1) of this section must describe:

(i) The extent of exposure of individuals to radiation or to radioactive material;

(ii) Levels of radiation and concentrations of radioactive material involved;

(iii) The cause of the exposure, levels, or concentrations; and

(iv) Corrective steps taken or planned to assure against a recurrence, including the schedule for achieving conformance with 40 CFR Part 190 and with associated license conditions.

(d) For holders of an operating license for a nuclear power plant, the incidents included in paragraphs (a) or (c) of this section must be reported in accordance with the procedures described in § 50.73 (b), (c), (d), (e), and (g) of this chapter and must also include the information required by paragraphs (a) and (c) of this section. Incidents reported in accordance with § 50.73 of this chapter need not be reported by a duplicate report under paragraphs (a) or (c) of this section.

(e) All other licensees who make reports under paragraphs (a) or (c) of this section shall, within 30 days after learning of the overexposure or excessive level or concentration, make a report in writing to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, D.C. 20555, with a copy to the appropriate NRC Regional Office listed in Appendix D of this part.

[25 FR 10914, Nov. 17, 1960, as amended at 35 FR 15068, Sept. 29, 1970; 46 FR 18526, Mar. 25, 1981; 48 FR 33860, July 26, 1983]

§ 20.406 [Reserved]

§ 20.407 Personnel monitoring reports.

Each person described in § 20.408 of this part shall, within the first quarter of each calendar year, submit to the Director, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, the reports specified in paragraphs (a) and (b) of this section, covering the preceding calendar year.[1]

(a) A report of either (1) the total number of individuals for whom personnel monitoring was required under § 20.202(a) or § 34.33(a) of this chapter during the calendar year; or (2) the total number of individuals for whom personnel monitoring was provided during the calendar year: *Provided, however*, That such total includes at least the number of individuals required to be reported under paragraph (a)(1) of this section. The report shall indicate whether it is submitted in accordance with paragraph (a)(1) or (a)(2) of this section. If personnel monitoring was not required to be provided to any individual by the licensee under §§ 20.202(a) or 34.33(a) of this chapter during the calendar year, the licensee shall submit a negative report indicating that such personnel monitoring was not required.

(b) A statistical summary report of the personnel monitoring information recorded by the licensee for individuals for whom personnel monitoring was either required or provided, as described in paragraph (a) of this section, indicating the number of individuals whose total whole body exposure recorded during the previous calendar year was in each of the following estimated exposure ranges:

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[1] A licensee whose license expires or terminates prior to, or on the last day of the calendar year, shall submit reports at the expiration or termination of the license, covering that part of the year during which the license was in effect.

Estimated whole body exposure range (rems) [1]	Number of individuals in each range
No measurable exposure	
Measurable exposure less than 0.1	
0.1 to 0.25	
0.25 to 0.5	
0.5 to 0.75	
0.75 to 1	
1 to 2	
2 to 3	
3 to 4	
4 to 5	
5 to 6	
6 to 7	
7 to 8	
8 to 9	
9 to 10	
10 to 11	
11 to 12	
12+	

[1] Individual values exactly equal to the values separating exposure ranges shall be reported in the higher range.

The low exposure range data are required in order to obtain better information about the exposures actually recorded. This section does not require improved measurements.

[43 FR 44829, Sept. 29, 1978, as amended at 49 FR 24513, June 14, 1984]

§ 20.408 Reports of personnel monitoring on termination of employment or work.

(a) This section applies to each person licensed by the Commission to:

(1) Operate a nuclear reactor designed to produce electrical or heat energy pursuant to § 50.21(b) or § 50.22 of this chapter or a testing facility as defined in § 50.2 of this chapter.

(2) Possess or use byproduct material for purposes of radiography pursuant to Parts 30 and 34 of this chapter;

(3) Possess or use at any one time, for purposes of fuel processing, fabricating, or reprocessing, special nuclear material in a quantity exceeding 5,000 grams of contained uranium-235, uranium-233, or plutonium or any combination thereof pursuant to Part 70 of this chapter;

(4) Possess high-level radioactive waste at a geologic repository operations area pursuant to Part 60 of this chapter; or

(5) Possess spent fuel in an independent spent fuel storage installation (ISFSI) or possess spent fuel or high level radioactive waste in a monitored retrievable storage installation (MRS) pursuant to Part 72 of this chapter; or

(6) Possess or use at any one time, for processing or manufacturing for distribution pursuant to Parts 30, 32, or 33 of this Chapter, byproduct material in quantities exceeding any one of the following quantities:

Radionuclide [1]	Quantity in curies
Cesium-137	1
Cobalt-60	1
Gold-198	100
Iodine-131	1
Iridium-192	10
Krypton-85	1,000
Promethium-147	10
Technetium-99m	1,000

[1] The Commission may require, as a license condition, or by rule, regulation or order pursuant to § 20.502, reports from licensees who are licensed to use radionuclides not on the list, in quantities sufficient to cause comparable radiation levels.

(7) Receive radioactive waste from other persons for disposal under Part 61 of this chapter.

(b) When an individual terminates employment with a licensee described in paragraph (a) of this section, or an individual assigned to work in such a licensee's facility, but not employed by the licensee, completes the work assignment in the licensee's facility, the licensee shall furnish to the Director, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, a report of the individual's exposures to radiation and radioactive material, incurred during the period of employment or work assignment in the licensee's facility, containing information recorded by the licensee pursuant to §§ 20.401(a) and 20.108. Such report shall be furnished within 30 days after the exposure of the individual has been determined by the licensee or 90 days after the date of termination of employment or work assignment, whichever is earlier.

[43 FR 44829, Sept. 29, 1978, as amended at 46 FR 13978, Feb. 25, 1981; 46 FR 58282, Dec. 1, 1981; 47 FR 57480, Dec. 27, 1982; 49 FR 24513, June 14, 1984; 50 FR 34085, Aug. 23, 1985; 53 FR 31680, Aug. 19, 1988]

§ 20.409 Notifications and reports to individuals.

(a) Requirements for notifications and reports to individuals of exposure to radiation or radioactive material are specified in § 19.13 of this chapter.

(b) When a licensee is required pursuant to §§ 20.405 or 20.408 to report to the Commission any exposure of an individual to radiation or radioactive material, the licensee shall also notify the individual. Such notice shall be transmitted at a time not later than the transmittal to the Commission, and shall comply with the provisions of § 19.13(a) of this chapter.

[38 FR 22220, Aug. 17, 1973]

EXCEPTIONS AND ADDITIONAL REQUIREMENTS

§ 20.501 Applications for exemptions.

The Commission may, upon application by any licensee or upon its own initiative, grant such exemptions from the requirements of the regulations in this part as it determines are authorized by law and will not result in undue hazard to life or property.

§ 20.502 Additional requirements.

The Commission may, by rule, regulation, or order, impose upon any licensee such requirements, in addition to those established in the regulations in this part, as it deems appropriate or necessary to protect health or to minimize danger to life or property.

ENFORCEMENT

§ 20.601 Violations.

An injunction or other court order may be obtained prohibiting any violation of any provision of the Atomic Energy Act of 1954, as amended, or Title II of the Energy Reorganization Act of 1974, or any regulation or order issued thereunder. A court order may be obtained for the payment of a civil penalty imposed pursuant to section 234 of the Act for violation of section 53, 57, 62, 63, 81, 82, 101, 103, 104, 107, or 109 of the Act, or section 206 of the Energy Reorganization Act of 1974, or any rule, regulation, or order issued thereunder, or any term, condition, or limitation of any license issued thereunder, or for any violation for which a license may be revoked under section 186 of the Act. Any person who willfully violates any provision of the Act or any regulation or order issued thereunder may be guilty of a crime and, upon conviction, may be punished by fine or imprisonment or both, as provided by law.

[40 FR 8784, Mar. 3, 1975]

APPENDIX A—PROTECTION FACTORS FOR RESPIRATORS [a]

Description [b]	Modes [c]	Protection factors [d]		Tested and certified equipment—National Institute for Occupational Safety and Heath/Mine Safety and Health Administration tests for permissibility
		Particulates only	Particulates, gases and vapors [e]	
I. Air-purifying respirators.[f]				
Facepiece, half-mask [g]	NP	10		30 CFR Part 11, Subpart K.
Facepiece, full	NP	50		
Facepiece, half-mask, full, or hood	PP	1,000		
II. Atmosphere-supplying respirators				
1. Air-line respirator:				
Facepiece, half-mask	CF		1,000	
Facepiece, half-mask	D		5	
Facepiece, full	CF		2,000	
Facepiece, full	D		5	30 CFR Part 11, Subpart J.
Facepiece, full	PD		2,000	
Hood	CF		(h)	
Suit	CF		(i)	(i)
2. Self-contained breathing apparatus (SCBA):				
Facepiece, full	D		50	
Facepiece, full	PD		[j] 10,000	30 CFR Part 11, Subpart H.
Facepiece, full	RD		50	

APPENDIX A—PROTECTION FACTORS FOR RESPIRATORS [a]—Continued

Description [b]	Modes [c]	Protection factors [d]		Tested and certified equipment—National Institute for Occupational Safety and Heath/Mine Safety and Health Administration tests for permeability
		Particulates only	Particulates, gases and vapors [e]	
Facepiece, full	RP		[l] 5,000	
III. Combination respirator: Any combination of air-purifying and atmosphere-supplying respirators.			[m]	30 CFR Part 11, § 11.63(b).

[a] For use in the selection of respiratory protective devices to be used only where the contaminants have been identified and the concentrations (or possible concentrations) are known.

[b] Only for shaven faces and where nothing interferes with the seal of tightfitting facepieces against the skin. (Hoods and suits are excepted.)

[c] The mode symbols are defined as follows: CF = continuous flow; D = demand; NP = negative pressure (i.e., negative phase during inhalation); PD = pressure demand (i.e., always positive pressure); PP = positive pressure; RD = demand, recirculating (closed circuit); RP = positive pressure, recirculating (closed circuit).

[d-1] The protection factor is a measure of the degree of protection afforded by a respirator, defined as the ratio of the concentration of airborne radioactive material outside the respiratory protective equipment to that inside the equipment (usually inside the facepiece) under conditions of use. It is applied to the ambient airborne concentration to estimate the concentrations inhaled by the wearer according to the following formula:

Concentration inhaled = (Ambient airborne concentration)/(Protection factor)

[d-2] The protection factors apply:

(a) Only for trained individuals wearing properly fitted respirators used and maintained under supervision in a well-planned respiratory protective program.

(b) For air-purifying respirators only when high efficiency particulate filters (above 99.97% removal efficiency by thermally generated 0.3 μm dioctyl phthalate (DOP) test) are used in atmospheres not deficient in oxygen and not containing radioactive gas or vapor respiratory hazards.

(c) No allowance is to be made for the use of sorbents against radioactive gases or vapors.

(d) For atmosphere-supplying respirators only when supplied with adequate respirable air. Respirable air shall be provided of the quality and quantity required in accordance with NIOSH/MSHA certification (described in 30 CFR Part 11). Oxygen and air shall not be used in the same apparatus.

[e] Excluding radioactive contaminants that present an absorption or submersion hazard. For tritium oxide, approximately one half of the intake occurs by absorption through the skin so that an overall protection factor of less than 2 is appropriate when atmosphere-supplying respirators are used to protect against tritium oxide. If the protection factor for a device is 5, the effective protection factor for tritium is about 1.4; for devices with protection factors of 10 the effective factor for tritium oxide is about 1.7; and for devices with protection factors of 100 or more the effective factor for tritium oxide is about 1.9. Air-purifying respirators are not suitable for protection against tritium oxide. See also footnote i concerning supplied-air suits.

[f] Canisters and cartridges shall not be used beyond service-life limitations.

[g] Under-chin type only. This type of respirator is not satisfactory for use where it might be possible (e.g., if an accident or emergency were to occur) for the ambient airborne concentration to reach instantaneous values greater than 10 times the pertinent values in Table 1, Column 1 of Appendix B of this part. This type of respirator is not suitable for protection against plutonium or other high-toxicity materials. The mask shall be tested for fit with irritant smoke, prior to use, each time it is donned.

[h] Equipment shall be operated in a manner that ensures that proper air flow-rates are maintained. A protection factor of no more than 1000 may be used for tested-and-certified supplied-air hoods when a minimum air flow of 6 cubic feet per minute is maintained and calibrated airline pressure gauges or flow measuring devices are used. A protection factor of up to 2000 may be used for tested and certified hoods only when the air flow is maintained at the manufacturer's recommended maximum rate for the equipment, this rate is greater than 6 cubic feet per minute, and calibrated airline pressure gauges or flow measuring devices are used.

The design of the supplied-air hood or helmet (with a minimum flow of 6 cfm of air) may determine its overall efficiency and the protection it provides. For example, some hoods aspirate contaminated air into the breathing zone when the wearer works with hands-over-head. This aspiration may be overcome if a short cape-like extension to the hood is worn under a coat or overalls. Other limitations specified by the approval agency shall be considered before using a hood in certain types of atmospheres, such as the design and its permeability to the contaminant under conditions of use.

[i] Appropriate protection factors shall be determined (see 20.103(e)), taking into account the design of the suit and its permeability to the contaminent under conditions of use. There shall be a standby rescue person equipped with self-contained breathing apparatus and communications equipment whenever supplied-air suits are used.

[j] No approval schedules are currently available for this equipment. Equipment shall be evaluated by testing or on the basis of reliable test information.

[k] This type of respirator may provide greater protection and be used as an emergency device in unknown concentrations for protection against inhalation hazards. External radiation hazards and other limitations to permitted exposure such as skin absorption shall be taken into account in these circumstances.

[l] Quantitative fit testing shall be performed on each individual and no more than 0.02% leakage is allowed with this type of apparatus. Perceptible outward leakage of gas from this or any positive pressure self-contained breathing apparatus is unacceptable because service life will be reduced substantially. Special training in the use of this type of apparatus shall be provided to the wearer (see footnote k).

[m] Protection factor for type and mode of operation as listed above.

NOTE 1: Protection factors for respirators, as may be approved by the U.S. Bureau of Mines/National Institute for Occupational Safety and Health (NIOSH) according to applicable approvals for respirators for type and mode of use to protect against airborne radionuclides, may be used to the extent that they do not exceed the protection factors listed in this table. The protection factors listed in this table may not be appropriate to circumstances where chemical or other respiratory hazards exist in addition to radiological hazards. The selection and use of respirators for these circumstances should take into account applicable approvals of the U.S. Bureau of Mines/NIOSH.

NOTE 2: Radioactive contaminants for which the concentration values in Table 1, column 1, Appendix B of this part are based on internal dose due to inhalation may, in addition, present external exposure hazards at higher concentrations. Under these circumstances, limitations on occupancy may have to be governed by external dose limits.

[47 FR 16165, Apr. 15, 1982; 47 FR 19511, May 6, 1982]

APPENDIX B—CONCENTRATIONS IN AIR AND WATER ABOVE NATURAL BACKGROUND

[See footnotes at end of Appendix B]

Element (atomic number)	Isotope [1]		Table I Col. 1—Air (μCi/ml)	Table I Col. 2—Water (μCi/ml)	Table II Col. 1—Air (μCi/ml)	Table II Col. 2—Water (μCi/ml)
Actinium (89)	Ac 227	S	2×10^{-12}	6×10^{-5}	8×10^{-14}	2×10^{-6}
		I	3×10^{-11}	9×10^{-3}	9×10^{-13}	3×10^{-4}
	Ac 228	S	8×10^{-8}	3×10^{-3}	3×10^{-9}	9×10^{-5}
		I	2×10^{-8}	3×10^{-3}	6×10^{-10}	9×10^{-5}
Americium (95)	Am 241	S	6×10^{-12}	1×10^{-4}	2×10^{-13}	4×10^{-6}
		I	1×10^{-10}	8×10^{-4}	4×10^{-12}	3×10^{-5}
	Am 242m	S	6×10^{-12}	1×10^{-4}	2×10^{-13}	4×10^{-6}
		I	3×10^{-10}	3×10^{-3}	9×10^{-12}	9×10^{-5}
	Am 242	S	4×10^{-8}	4×10^{-3}	1×10^{-9}	1×10^{-4}
		I	5×10^{-8}	4×10^{-3}	2×10^{-9}	1×10^{-4}
	Am 243	S	6×10^{-12}	1×10^{-4}	2×10^{-13}	4×10^{-6}
		I	1×10^{-10}	8×10^{-4}	4×10^{-12}	3×10^{-5}
	Am 244	S	4×10^{-6}	1×10^{-1}	1×10^{-7}	5×10^{-3}
		I	2×10^{-5}	1×10^{-1}	8×10^{-7}	5×10^{-3}
Antimony	Sb 122	S	2×10^{-7}	8×10^{-4}	6×10^{-9}	3×10^{-5}
		I	1×10^{-7}	8×10^{-4}	5×10^{-9}	3×10^{-5}
	Sb 124	S	2×10^{-7}	7×10^{-4}	5×10^{-9}	2×10^{-5}
		I	2×10^{-8}	7×10^{-4}	7×10^{-10}	2×10^{-5}
	Sb 125	S	5×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
		I	3×10^{-8}	3×10^{-3}	9×10^{-10}	1×10^{-4}
Argon (18)	A 37	Sub [2]	6×10^{-3}		1×10^{-4}	
	A 41	Sub	2×10^{-6}		4×10^{-8}	
Arsenic (33)	As 73	S	2×10^{-6}	1×10^{-2}	7×10^{-8}	5×10^{-4}
		I	4×10^{-7}	1×10^{-2}	1×10^{-8}	5×10^{-4}
	As 74	S	3×10^{-7}	2×10^{-3}	1×10^{-8}	5×10^{-5}
		I	1×10^{-7}	2×10^{-3}	4×10^{-9}	5×10^{-5}
	As 76	S	1×10^{-7}	6×10^{-4}	4×10^{-9}	2×10^{-5}
		I	1×10^{-7}	6×10^{-4}	3×10^{-9}	2×10^{-5}
	As 77	S	5×10^{-7}	2×10^{-3}	2×10^{-8}	8×10^{-5}
		I	4×10^{-7}	2×10^{-3}	1×10^{-8}	8×10^{-5}
Astatine (85)	At 211	S	7×10^{-9}	5×10^{-5}	2×10^{-10}	2×10^{-6}
		I	3×10^{-8}	2×10^{-3}	1×10^{-9}	7×10^{-5}
Barium (56)	Ba 131	S	1×10^{-6}	5×10^{-3}	4×10^{-8}	2×10^{-4}
		I	4×10^{-7}	5×10^{-3}	1×10^{-8}	2×10^{-4}
	Ba 140	S	1×10^{-7}	8×10^{-4}	4×10^{-9}	3×10^{-5}
		I	4×10^{-8}	7×10^{-4}	1×10^{-9}	2×10^{-5}
Berkelium (97)	Bk 249	S	9×10^{-10}	2×10^{-2}	3×10^{-11}	6×10^{-4}
		I	1×10^{-7}	2×10^{-2}	4×10^{-9}	6×10^{-4}
	Bk 250	S	1×10^{-7}	6×10^{-3}	5×10^{-9}	2×10^{-4}
		I	1×10^{-6}	6×10^{-3}	4×10^{-8}	2×10^{-4}
Beryllium (4)	Be 7	S	6×10^{-6}	5×10^{-2}	2×10^{-7}	2×10^{-3}
		I	1×10^{-6}	5×10^{-2}	4×10^{-8}	2×10^{-3}
Bismuth (83)	Bi 206	S	2×10^{-7}	1×10^{-3}	6×10^{-9}	4×10^{-5}
		I	1×10^{-7}	1×10^{-3}	5×10^{-9}	4×10^{-5}
	Bi 207	S	2×10^{-7}	2×10^{-3}	6×10^{-9}	6×10^{-5}
		I	1×10^{-8}	2×10^{-3}	5×10^{-10}	6×10^{-5}
	Bi 210	S	6×10^{-9}	1×10^{-3}	2×10^{-10}	4×10^{-5}
		I	6×10^{-9}	1×10^{-3}	2×10^{-10}	4×10^{-5}
	Bi 212	S	1×10^{-7}	1×10^{-2}	3×10^{-9}	4×10^{-4}
		I	2×10^{-7}	1×10^{-2}	7×10^{-9}	4×10^{-4}
Bromine (35)	Br 82	S	1×10^{-6}	8×10^{-3}	4×10^{-8}	3×10^{-4}
		I	2×10^{-7}	1×10^{-3}	6×10^{-9}	4×10^{-5}
Cadmium (48)	Cd 109	S	5×10^{-8}	5×10^{-3}	2×10^{-9}	2×10^{-4}
		I	7×10^{-8}	5×10^{-3}	3×10^{-9}	2×10^{-4}
	Cd 115m	S	4×10^{-8}	7×10^{-4}	1×10^{-9}	3×10^{-5}
		I	4×10^{-8}	7×10^{-4}	1×10^{-9}	3×10^{-5}
	Cd 115	S	2×10^{-7}	1×10^{-3}	8×10^{-9}	3×10^{-5}
		I	2×10^{-7}	1×10^{-3}	6×10^{-9}	4×10^{-5}
Calcium (20)	Ca 45	S	3×10^{-8}	3×10^{-4}	1×10^{-9}	9×10^{-6}
		I	1×10^{-7}	5×10^{-3}	4×10^{-9}	2×10^{-4}
	Ca 47	S	2×10^{-7}	1×10^{-3}	6×10^{-9}	5×10^{-5}

APPENDIX B—CONCENTRATIONS IN AIR AND WATER ABOVE NATURAL BACKGROUND—Continued

[See footnotes at end of Appendix B]

Element (atomic number)	Isotope [1]		Table I		Table II	
			Col. 1—Air (μCi/ml)	Col. 2—Water (μCi/ml)	Col. 1—Air (μCi/ml)	Col. 2—Water (μCi/ml)
		I	$2\cdot10^{-7}$	$1\cdot10^{-3}$	$6\cdot10^{-9}$	$3\cdot10^{-5}$
Californium (98)	Cf 249	S	$2\cdot10^{-12}$	$1\cdot10^{-4}$	$5\cdot10^{-14}$	$4\cdot10^{-6}$
		I	$1\cdot10^{-10}$	$7\cdot10^{-4}$	$3\cdot10^{-12}$	$2\cdot10^{-5}$
	Cf 250	S	$5\cdot10^{-12}$	$4\cdot10^{-4}$	$2\cdot10^{-13}$	$1\cdot10^{-5}$
		I	$1\cdot10^{-10}$	$7\cdot10^{-4}$	$3\cdot10^{-12}$	$3\cdot10^{-5}$
	Cf 251	S	$2\cdot10^{-12}$	$1\cdot10^{-4}$	$6\cdot10^{-14}$	$4\cdot10^{-6}$
		I	$1\cdot10^{-10}$	$8\cdot10^{-4}$	$3\cdot10^{-12}$	$3\cdot10^{-5}$
	Cf 252	S	$6\cdot10^{-12}$	$2\cdot10^{-4}$	$2\cdot10^{-13}$	$7\cdot10^{-6}$
		I	$3\cdot10^{-11}$	$2\cdot10^{-4}$	$1\cdot10^{-12}$	$7\cdot10^{-6}$
	Cf 253	S	$8\cdot10^{-10}$	$4\cdot10^{-3}$	$3\cdot10^{-11}$	$1\cdot10^{-4}$
		I	$8\cdot10^{-10}$	$4\cdot10^{-3}$	$3\cdot10^{-11}$	$1\cdot10^{-4}$
	Cf 254	S	$5\cdot10^{-12}$	$4\cdot10^{-6}$	$2\cdot10^{-13}$	$1\cdot10^{-7}$
		I	$5\cdot10^{-12}$	$4\cdot10^{-6}$	$2\cdot10^{-13}$	$1\cdot10^{-7}$
Carbon (6)	C 14	S	$4\cdot10^{-6}$	$2\cdot10^{-2}$	$1\cdot10^{-7}$	$8\cdot10^{-4}$
	(CO_2)	Sub	$5\cdot10^{-5}$		$1\cdot10^{-6}$	
Cerium (58)	Ce 141	S	$4\cdot10^{-7}$	$3\cdot10^{-3}$	$2\cdot10^{-8}$	$9\cdot10^{-5}$
		I	$2\cdot10^{-7}$	$3\cdot10^{-3}$	$5\cdot10^{-9}$	$9\cdot10^{-5}$
	Ce 143	S	$3\cdot10^{-7}$	$1\cdot10^{-3}$	$9\cdot10^{-9}$	$4\cdot10^{-5}$
		I	$2\cdot10^{-7}$	$1\cdot10^{-3}$	$7\cdot10^{-9}$	$4\cdot10^{-5}$
	Ce 144	S	$1\cdot10^{-8}$	$3\cdot10^{-4}$	$3\cdot10^{-10}$	$1\cdot10^{-5}$
		I	$6\cdot10^{-9}$	$3\cdot10^{-4}$	$2\cdot10^{-10}$	$1\cdot10^{-5}$
Cesium (55)	Cs 131	S	$1\cdot10^{-5}$	$7\cdot10^{-2}$	$4\cdot10^{-7}$	$2\cdot10^{-3}$
		I	$3\cdot10^{-6}$	$3\cdot10^{-2}$	$1\cdot10^{-7}$	$9\cdot10^{-4}$
	Cs 134m	S	$4\cdot10^{-5}$	$2\cdot10^{-1}$	$1\cdot10^{-6}$	$6\cdot10^{-3}$
		I	$6\cdot10^{-6}$	$3\cdot10^{-2}$	$2\cdot10^{-7}$	$1\cdot10^{-3}$
	Cs 134	S	$4\cdot10^{-8}$	$3\cdot10^{-4}$	$1\cdot10^{-9}$	$9\cdot10^{-6}$
		I	$1\cdot10^{-8}$	$1\cdot10^{-3}$	$4\cdot10^{-10}$	$4\cdot10^{-5}$
	Cs 135	S	$5\cdot10^{-7}$	$3\cdot10^{-3}$	$2\cdot10^{-8}$	$1\cdot10^{-4}$
		I	$9\cdot10^{-8}$	$7\cdot10^{-3}$	$3\cdot10^{-9}$	$2\cdot10^{-4}$
	Cs 136	S	$4\cdot10^{-7}$	$2\cdot10^{-3}$	$1\cdot10^{-8}$	$9\cdot10^{-5}$
		I	$2\cdot10^{-7}$	$2\cdot10^{-3}$	$6\cdot10^{-9}$	$6\cdot10^{-5}$
	Cs 137	S	$6\cdot10^{-8}$	$4\cdot10^{-4}$	$2\cdot10^{-9}$	$2\cdot10^{-5}$
		I	$1\cdot10^{-8}$	$1\cdot10^{-3}$	$5\cdot10^{-10}$	$4\cdot10^{-5}$
Chlorine (17)	Cl 36	S	$4\cdot10^{-7}$	$2\cdot10^{-3}$	$1\cdot10^{-8}$	$8\cdot10^{-5}$
		I	$2\cdot10^{-8}$	$2\cdot10^{-3}$	$8\cdot10^{-10}$	$6\cdot10^{-5}$
	Cl 38	S	$3\cdot10^{-6}$	$1\cdot10^{-2}$	$9\cdot10^{-8}$	$4\cdot10^{-4}$
		I	$2\cdot10^{-6}$	$1\cdot10^{-2}$	$7\cdot10^{-8}$	$4\cdot10^{-4}$
Chromium (24)	Cr 51	S	$1\cdot10^{-5}$	$5\cdot10^{-2}$	$4\cdot10^{-7}$	$2\cdot10^{-3}$
		I	$2\cdot10^{-6}$	$5\cdot10^{-2}$	$8\cdot10^{-8}$	$2\cdot10^{-3}$
Cobalt (27)	Co 57	S	$3\cdot10^{-6}$	$2\cdot10^{-2}$	$1\cdot10^{-7}$	$5\cdot10^{-4}$
		I	$2\cdot10^{-7}$	$1\cdot10^{-2}$	$6\cdot10^{-9}$	$4\cdot10^{-4}$
	Co 58m	S	$2\cdot10^{-5}$	$8\cdot10^{-2}$	$6\cdot10^{-7}$	$3\cdot10^{-3}$
		I	$9\cdot10^{-6}$	$6\cdot10^{-2}$	$3\cdot10^{-7}$	$2\cdot10^{-3}$
	Co 58	S	$8\cdot10^{-7}$	$4\cdot10^{-3}$	$3\cdot10^{-8}$	$1\cdot10^{-4}$
		I	$5\cdot10^{-8}$	$3\cdot10^{-3}$	$2\cdot10^{-9}$	$9\cdot10^{-5}$
	Co 60	S	$3\cdot10^{-7}$	$1\cdot10^{-3}$	$1\cdot10^{-8}$	$5\cdot10^{-5}$
		I	$9\cdot10^{-9}$	$1\cdot10^{-3}$	$3\cdot10^{-10}$	$3\cdot10^{-5}$
Copper (29)	Cu 64	S	$2\cdot10^{-6}$	$1\cdot10^{-2}$	$7\cdot10^{-8}$	$3\cdot10^{-4}$
		I	$1\cdot10^{-6}$	$6\cdot10^{-3}$	$4\cdot10^{-8}$	$2\cdot10^{-4}$
Curium (96)	Cm 242	S	$1\cdot10^{-10}$	$7\cdot10^{-4}$	$4\cdot10^{-12}$	$2\cdot10^{-5}$
		I	$2\cdot10^{-10}$	$7\cdot10^{-4}$	$6\cdot10^{-12}$	$2\cdot10^{-5}$
	Cm 243	S	$6\cdot10^{-12}$	$1\cdot10^{-4}$	$2\cdot10^{-13}$	$5\cdot10^{-6}$
		I	$1\cdot10^{-10}$	$7\cdot10^{-4}$	$3\cdot10^{-12}$	$2\cdot10^{-5}$
	Cm 244	S	$9\cdot10^{-12}$	$2\cdot10^{-4}$	$3\cdot10^{-13}$	$7\cdot10^{-6}$
		I	$1\cdot10^{-10}$	$8\cdot10^{-4}$	$3\cdot10^{-12}$	$3\cdot10^{-5}$
	Cm 245	S	$5\cdot10^{-12}$	$1\cdot10^{-4}$	$2\cdot10^{-13}$	$4\cdot10^{-6}$
		I	$1\cdot10^{-10}$	$8\cdot10^{-4}$	$4\cdot10^{-12}$	$3\cdot10^{-5}$
	Cm 246	S	$5\cdot10^{-12}$	$1\cdot10^{-4}$	$2\cdot10^{-13}$	$4\cdot10^{-6}$
		I	$1\cdot10^{-10}$	$8\cdot10^{-4}$	$4\cdot10^{-12}$	$3\cdot10^{-5}$
	Cm 247	S	$5\cdot10^{-12}$	$1\cdot10^{-4}$	$2\cdot10^{-13}$	$4\cdot10^{-6}$
		I	$1\cdot10^{-10}$	$6\cdot10^{-4}$	$4\cdot10^{-12}$	$2\cdot10^{-5}$
	Cm 248	S	$6\cdot10^{-13}$	$1\cdot10^{-5}$	$2\cdot10^{-14}$	$4\cdot10^{-7}$
		I	$1\cdot10^{-11}$	$4\cdot10^{-5}$	$4\cdot10^{-13}$	$1\cdot10^{-6}$
	Cm 249	S	$1\cdot10^{-5}$	$6\cdot10^{-2}$	$4\cdot10^{-7}$	$2\cdot10^{-3}$
		I	$1\cdot10^{-5}$	$6\cdot10^{-2}$	$4\cdot10^{-7}$	$2\cdot10^{-3}$

APPENDIX B—CONCENTRATIONS IN AIR AND WATER ABOVE NATURAL BACKGROUND—Continued

[See footnotes at end of Appendix B]

Element (atomic number)	Isotope [1]		Table I		Table II	
			Col. 1—Air (μCi/ml)	Col. 2—Water (μCi/ml)	Col. 1—Air (μCi/ml)	Col. 2—Water (μCi/ml)
Dysprosium (66)	Dy 165	S	3×10^{-6}	1×10^{-2}	9×10^{-8}	4×10^{-4}
		I	2×10^{-6}	1×10^{-2}	7×10^{-8}	4×10^{-4}
	Dy 166	S	2×10^{-7}	1×10^{-3}	8×10^{-9}	4×10^{-5}
		I	2×10^{-7}	1×10^{-3}	7×10^{-9}	4×10^{-5}
Einsteinium (99)	Es 253	S	8×10^{-10}	7×10^{-4}	3×10^{-11}	2×10^{-5}
		I	6×10^{-10}	7×10^{-4}	2×10^{-11}	2×10^{-5}
	Es 254m	S	5×10^{-9}	5×10^{-4}	2×10^{-10}	2×10^{-5}
		I	6×10^{-9}	5×10^{-4}	2×10^{-10}	2×10^{-5}
	Es 254	S	2×10^{-11}	4×10^{-4}	6×10^{-13}	1×10^{-5}
		I	1×10^{-10}	4×10^{-4}	4×10^{-12}	1×10^{-5}
	Es 255	S	5×10^{-10}	8×10^{-4}	2×10^{-11}	3×10^{-5}
		I	4×10^{-10}	8×10^{-4}	1×10^{-11}	3×10^{-5}
Erbium (68)	Er 169	S	6×10^{-7}	3×10^{-3}	2×10^{-8}	9×10^{-5}
		I	4×10^{-7}	3×10^{-3}	1×10^{-8}	9×10^{-5}
	Er 171	S	7×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
		I	6×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
Europium (63)	Eu 152 (T/2 9.2 hrs)	S	4×10^{-7}	2×10^{-3}	1×10^{-8}	6×10^{-5}
		I	3×10^{-7}	2×10^{-3}	1×10^{-8}	6×10^{-5}
	Eu 152 (T/2 13 yrs)	S	1×10^{-8}	2×10^{-3}	4×10^{-10}	8×10^{-5}
		I	2×10^{-8}	2×10^{-3}	6×10^{-10}	8×10^{-5}
	Eu 154	S	4×10^{-9}	6×10^{-4}	1×10^{-10}	2×10^{-5}
		I	7×10^{-9}	6×10^{-4}	2×10^{-10}	2×10^{-5}
	Eu 155	S	9×10^{-8}	6×10^{-3}	3×10^{-9}	2×10^{-4}
		I	7×10^{-8}	6×10^{-3}	3×10^{-9}	2×10^{-4}
Fermium (100)	Fm 254	S	6×10^{-8}	4×10^{-3}	2×10^{-9}	1×10^{-4}
		I	7×10^{-8}	4×10^{-3}	2×10^{-9}	1×10^{-4}
	Fm 255	S	2×10^{-8}	1×10^{-3}	6×10^{-10}	3×10^{-5}
		I	1×10^{-8}	1×10^{-3}	4×10^{-10}	3×10^{-5}
	Fm 256	S	3×10^{-9}	3×10^{-5}	1×10^{-10}	9×10^{-7}
		I	2×10^{-9}	3×10^{-5}	6×10^{-11}	9×10^{-7}
Fluorine (9)	F 18	S	5×10^{-6}	2×10^{-2}	2×10^{-7}	8×10^{-4}
		I	3×10^{-6}	1×10^{-2}	9×10^{-8}	5×10^{-4}
Gadolinium (64)	Gd 153	S	2×10^{-7}	6×10^{-3}	8×10^{-9}	2×10^{-4}
		I	9×10^{-8}	6×10^{-3}	3×10^{-9}	2×10^{-4}
	Gd 159	S	5×10^{-7}	2×10^{-3}	2×10^{-8}	8×10^{-5}
		I	4×10^{-7}	2×10^{-3}	1×10^{-8}	8×10^{-5}
Gallium (31)	Ga 72	S	2×10^{-7}	1×10^{-3}	8×10^{-9}	4×10^{-5}
		I	2×10^{-7}	1×10^{-3}	6×10^{-9}	4×10^{-5}
Germanium (32)	Ge 71	S	1×10^{-5}	5×10^{-2}	4×10^{-7}	2×10^{-3}
		I	6×10^{-6}	5×10^{-2}	2×10^{-7}	2×10^{-3}
Gold (79)	Au 196	S	1×10^{-6}	5×10^{-3}	4×10^{-8}	2×10^{-4}
		I	6×10^{-7}	4×10^{-3}	2×10^{-8}	1×10^{-4}
	Au 198	S	3×10^{-7}	2×10^{-3}	1×10^{-8}	5×10^{-5}
		I	2×10^{-7}	1×10^{-3}	8×10^{-9}	5×10^{-5}
	Au 199	S	1×10^{-6}	5×10^{-3}	4×10^{-8}	2×10^{-4}
		I	8×10^{-7}	4×10^{-3}	3×10^{-8}	2×10^{-4}
Hafnium (72)	Hf 181	S	4×10^{-8}	2×10^{-3}	1×10^{-9}	7×10^{-5}
		I	7×10^{-8}	2×10^{-3}	3×10^{-9}	7×10^{-5}
Holmium (67)	Ho 166	S	2×10^{-7}	9×10^{-4}	7×10^{-9}	3×10^{-5}
		I	2×10^{-7}	9×10^{-4}	6×10^{-9}	3×10^{-5}
Hydrogen (1)	H3	S	5×10^{-6}	1×10^{-1}	2×10^{-7}	3×10^{-3}
		I	5×10^{-6}	1×10^{-1}	2×10^{-7}	3×10^{-3}
		Sub	2×10^{-3}		4×10^{-5}	
Indium (49)	In 113m	S	8×10^{-6}	4×10^{-2}	3×10^{-7}	1×10^{-3}
		I	7×10^{-6}	4×10^{-2}	2×10^{-7}	1×10^{-3}
	In 114m	S	1×10^{-7}	5×10^{-4}	4×10^{-9}	2×10^{-5}
		I	2×10^{-8}	5×10^{-4}	7×10^{-10}	2×10^{-5}
	In 115m	S	2×10^{-6}	1×10^{-2}	8×10^{-8}	4×10^{-4}
		I	2×10^{-6}	1×10^{-2}	6×10^{-8}	4×10^{-4}
	In 115	S	2×10^{-7}	3×10^{-3}	9×10^{-9}	9×10^{-5}
		I	3×10^{-8}	3×10^{-3}	1×10^{-9}	9×10^{-5}
Iodine (53)	I 125	S	5×10^{-9}	4×10^{-5}	8×10^{-11}	2×10^{-7}
		I	2×10^{-7}	6×10^{-3}	6×10^{-9}	2×10^{-4}
	I 126	S	8×10^{-9}	5×10^{-5}	9×10^{-11}	3×10^{-7}
		I	3×10^{-7}	3×10^{-3}	1×10^{-8}	9×10^{-5}

APPENDIX B—CONCENTRATIONS IN AIR AND WATER ABOVE NATURAL BACKGROUND—Continued

[See footnotes at end of Appendix B]

Element (atomic number)	Isotope [1]		Table I Col. 1—Air (μCi/ml)	Table I Col. 2—Water (μCi/ml)	Table II Col. 1—Air (μCi/ml)	Table II Col. 2—Water (μCi/ml)
	I 129	S	2×10^{-9}	1×10^{-5}	2×10^{-11}	6×10^{-8}
		I	7×10^{-8}	6×10^{-3}	2×10^{-9}	2×10^{-4}
	I 131	S	9×10^{-9}	6×10^{-5}	1×10^{-10}	3×10^{-7}
		I	3×10^{-7}	2×10^{-3}	1×10^{-8}	6×10^{-5}
	I 132	S	2×10^{-7}	2×10^{-4}	3×10^{-9}	8×10^{-6}
		I	9×10^{-7}	5×10^{-3}	3×10^{-8}	2×10^{-4}
	I 133	S	3×10^{-8}	2×10^{-4}	4×10^{-10}	1×10^{-6}
		I	2×10^{-7}	1×10^{-3}	7×10^{-9}	4×10^{-5}
	I 134	S	5×10^{-7}	4×10^{-4}	6×10^{-9}	2×10^{-5}
		I	3×10^{-6}	2×10^{-2}	1×10^{-7}	6×10^{-4}
	I 135	S	1×10^{-7}	7×10^{-5}	1×10^{-9}	4×10^{-6}
		I	4×10^{-7}	2×10^{-3}	1×10^{-8}	7×10^{-5}
Iridium (77)	Ir 190	S	1×10^{-6}	6×10^{-3}	4×10^{-8}	2×10^{-4}
		I	4×10^{-7}	5×10^{-3}	1×10^{-8}	2×10^{-4}
	Ir 192	S	1×10^{-7}	1×10^{-3}	4×10^{-9}	4×10^{-5}
		I	3×10^{-8}	1×10^{-3}	9×10^{-10}	4×10^{-5}
	Ir 194	S	2×10^{-7}	1×10^{-3}	8×10^{-9}	3×10^{-5}
		I	2×10^{-7}	9×10^{-4}	5×10^{-9}	3×10^{-5}
Iron (26)	Fe 55	S	9×10^{-7}	2×10^{-2}	3×10^{-8}	8×10^{-4}
		I	1×10^{-6}	7×10^{-2}	3×10^{-8}	2×10^{-3}
	Fe 59	S	1×10^{-7}	2×10^{-3}	5×10^{-9}	6×10^{-5}
		I	5×10^{-8}	2×10^{-3}	2×10^{-9}	5×10^{-5}
Krypton (36)	Kr 85m	Sub	6×10^{-6}		1×10^{-7}	
	Kr 85	Sub	1×10^{-5}		3×10^{-7}	
	Kr 87	Sub	1×10^{-6}		2×10^{-8}	
	Kr 88	Sub	1×10^{-6}		2×10^{-8}	
Lanthanum (57)	La 140	S	2×10^{-7}	7×10^{-4}	5×10^{-9}	2×10^{-5}
		I	1×10^{-7}	7×10^{-4}	4×10^{-9}	2×10^{-5}
Lead (82)	Pb 203	S	3×10^{-6}	1×10^{-2}	9×10^{-8}	4×10^{-4}
		I	2×10^{-6}	1×10^{-2}	6×10^{-8}	4×10^{-4}
	Pb 210	S	1×10^{-10}	4×10^{-6}	4×10^{-12}	1×10^{-7}
		I	2×10^{-10}	5×10^{-3}	8×10^{-12}	2×10^{-4}
	Pb 212	S	2×10^{-8}	6×10^{-4}	6×10^{-10}	2×10^{-5}
		I	2×10^{-8}	5×10^{-4}	7×10^{-10}	2×10^{-5}
Lutetium (71)	Lu 177	S	6×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
		I	5×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
Manganese (25)	Mn 52	S	2×10^{-7}	1×10^{-3}	7×10^{-9}	3×10^{-5}
		I	1×10^{-7}	9×10^{-4}	5×10^{-9}	3×10^{-5}
	Mn 54	S	4×10^{-7}	4×10^{-3}	1×10^{-8}	1×10^{-4}
		I	4×10^{-8}	3×10^{-3}	1×10^{-9}	1×10^{-4}
	Mn 56	S	8×10^{-7}	4×10^{-3}	3×10^{-8}	1×10^{-4}
		I	5×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
Mercury (80)	Hg 197m	S	7×10^{-7}	6×10^{-3}	3×10^{-8}	2×10^{-4}
		I	8×10^{-7}	5×10^{-3}	3×10^{-8}	2×10^{-4}
	Hg 197	S	1×10^{-6}	9×10^{-3}	4×10^{-8}	3×10^{-4}
		I	3×10^{-6}	1×10^{-2}	9×10^{-8}	5×10^{-4}
	Hg 203	S	7×10^{-8}	5×10^{-4}	2×10^{-9}	2×10^{-5}
		I	1×10^{-7}	3×10^{-3}	4×10^{-9}	1×10^{-4}
Molybdenum (42)	Mo 99	S	7×10^{-7}	5×10^{-3}	3×10^{-8}	2×10^{-4}
		I	2×10^{-7}	1×10^{-3}	7×10^{-9}	4×10^{-5}
Neodymium (60)	Nd 144	S	8×10^{-11}	2×10^{-3}	3×10^{-12}	7×10^{-5}
		I	3×10^{-10}	2×10^{-3}	1×10^{-11}	8×10^{-5}
	Nd 147	S	4×10^{-7}	2×10^{-3}	1×10^{-8}	6×10^{-5}
		I	2×10^{-7}	2×10^{-3}	8×10^{-9}	6×10^{-5}
	Nd 149	S	2×10^{-6}	8×10^{-3}	6×10^{-8}	3×10^{-4}
		I	1×10^{-6}	8×10^{-3}	5×10^{-8}	3×10^{-4}
Neptunium (93)	Np 237	S	4×10^{-12}	9×10^{-5}	1×10^{-13}	3×10^{-6}
		I	1×10^{-10}	9×10^{-4}	4×10^{-12}	3×10^{-5}
	Np 239	S	8×10^{-7}	4×10^{-3}	3×10^{-8}	1×10^{-4}
		I	7×10^{-7}	4×10^{-3}	2×10^{-8}	1×10^{-4}
Nickel (28)	Ni 59	S	5×10^{-7}	6×10^{-3}	2×10^{-8}	2×10^{-4}
		I	8×10^{-7}	6×10^{-2}	3×10^{-8}	2×10^{-3}
	Ni 63	S	6×10^{-8}	8×10^{-4}	2×10^{-9}	3×10^{-5}
		I	3×10^{-7}	2×10^{-2}	1×10^{-8}	7×10^{-4}
	Ni 65	S	9×10^{-7}	4×10^{-3}	3×10^{-8}	1×10^{-4}

APPENDIX B—CONCENTRATIONS IN AIR AND WATER ABOVE NATURAL BACKGROUND—Continued

[See footnotes at end of Appendix B]

Element (atomic number)	Isotope [1]		Table I		Table II	
			Col. 1—Air (μCi/ml)	Col. 2—Water (μCi/ml)	Col. 1—Air (μCi/ml)	Col. 2—Water (μCi/ml)
		I	5×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
Niobium (Columbium) (41)	Nb 93m	S	1×10^{-7}	1×10^{-2}	4×10^{-9}	4×10^{-4}
		I	2×10^{-7}	1×10^{-2}	5×10^{-9}	4×10^{-4}
	Nb 95	S	5×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
		I	1×10^{-7}	3×10^{-3}	3×10^{-9}	1×10^{-4}
	Nb 97	S	6×10^{-6}	3×10^{-2}	2×10^{-7}	9×10^{-4}
		I	5×10^{-6}	3×10^{-2}	2×10^{-7}	9×10^{-4}
Osmium (76)	Os 185	S	5×10^{-7}	2×10^{-3}	2×10^{-8}	7×10^{-5}
		I	5×10^{-8}	2×10^{-3}	2×10^{-9}	7×10^{-5}
	Os 191m	S	2×10^{-5}	7×10^{-2}	6×10^{-7}	3×10^{-3}
		I	9×10^{-6}	7×10^{-2}	3×10^{-7}	2×10^{-3}
	Os 191	S	1×10^{-6}	5×10^{-3}	4×10^{-8}	2×10^{-4}
		I	4×10^{-7}	5×10^{-3}	1×10^{-8}	2×10^{-4}
	Os 193	S	4×10^{-7}	2×10^{-3}	1×10^{-8}	6×10^{-5}
		I	3×10^{-7}	2×10^{-3}	9×10^{-9}	5×10^{-5}
Palladium (46)	Pd 103	S	1×10^{-6}	1×10^{-2}	5×10^{-8}	3×10^{-4}
		I	7×10^{-7}	8×10^{-3}	3×10^{-8}	3×10^{-4}
	Pd 109	S	6×10^{-7}	3×10^{-3}	2×10^{-8}	9×10^{-5}
		I	4×10^{-7}	2×10^{-3}	1×10^{-8}	7×10^{-5}
Phosphorus (15)	P 32	S	7×10^{-8}	5×10^{-4}	2×10^{-9}	2×10^{-5}
		I	8×10^{-8}	7×10^{-4}	3×10^{-9}	2×10^{-5}
Platinum (78)	Pt 191	S	8×10^{-7}	4×10^{-3}	3×10^{-8}	1×10^{-4}
		I	6×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
	Pt 193m	S	7×10^{-6}	3×10^{-2}	2×10^{-7}	1×10^{-3}
		I	5×10^{-6}	3×10^{-2}	2×10^{-7}	1×10^{-3}
	Pt 193	S	1×10^{-6}	3×10^{-2}	4×10^{-8}	9×10^{-4}
		I	3×10^{-7}	5×10^{-2}	1×10^{-8}	2×10^{-3}
	Pt 197m	S	6×10^{-6}	3×10^{-2}	2×10^{-7}	1×10^{-3}
		I	5×10^{-6}	3×10^{-2}	2×10^{-7}	9×10^{-4}
	Pt 197	S	8×10^{-7}	4×10^{-3}	3×10^{-8}	1×10^{-4}
		I	6×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
Plutonium (94)	Pu 238	S	2×10^{-12}	1×10^{-4}	7×10^{-14}	5×10^{-6}
		I	3×10^{-11}	8×10^{-4}	1×10^{-12}	3×10^{-5}
	Pu 239	S	2×10^{-12}	1×10^{-4}	6×10^{-14}	5×10^{-6}
		I	4×10^{-11}	8×10^{-4}	1×10^{-12}	3×10^{-5}
	Pu 240	S	2×10^{-12}	1×10^{-4}	6×10^{-14}	5×10^{-6}
		I	4×10^{-11}	8×10^{-4}	1×10^{-12}	3×10^{-5}
	Pu 241	S	9×10^{-11}	7×10^{-3}	3×10^{-12}	2×10^{-4}
		I	4×10^{-8}	4×10^{-2}	1×10^{-9}	1×10^{-3}
	Pu 242	S	2×10^{-12}	1×10^{-4}	6×10^{-14}	5×10^{-6}
		I	4×10^{-11}	9×10^{-4}	1×10^{-12}	3×10^{-5}
	Pu 243	S	2×10^{-6}	1×10^{-2}	6×10^{-8}	3×10^{-4}
		I	2×10^{-6}	1×10^{-2}	8×10^{-8}	3×10^{-4}
	Pu 244	S	2×10^{-12}	1×10^{-4}	6×10^{-14}	4×10^{-6}
		I	3×10^{-11}	3×10^{-4}	1×10^{-12}	1×10^{-5}
Polonium (84)	Po 210	S	5×10^{-10}	2×10^{-5}	2×10^{-11}	7×10^{-7}
		I	2×10^{-10}	8×10^{-4}	7×10^{-12}	3×10^{-5}
Potassium (19)	K42	S	2×10^{-6}	9×10^{-4}	7×10^{-8}	3×10^{-5}
		I	1×10^{-7}	6×10^{-4}	4×10^{-9}	2×10^{-5}
Praseodymium (59)	Pr 142	S	2×10^{-7}	9×10^{-4}	7×10^{-9}	3×10^{-5}
		I	2×10^{-7}	9×10^{-4}	5×10^{-9}	3×10^{-5}
	Pr 143	S	3×10^{-7}	1×10^{-3}	1×10^{-8}	5×10^{-5}
		I	2×10^{-7}	1×10^{-3}	6×10^{-9}	5×10^{-5}
Promethium (61)	Pm 147	S	6×10^{-8}	6×10^{-3}	2×10^{-9}	2×10^{-4}
		I	1×10^{-7}	6×10^{-3}	3×10^{-9}	2×10^{-4}
	Pm 149	S	3×10^{-7}	1×10^{-3}	1×10^{-8}	4×10^{-5}
		I	2×10^{-7}	1×10^{-3}	8×10^{-9}	4×10^{-5}
Protoactinium (91)	Pa 230	S	2×10^{-9}	7×10^{-3}	6×10^{-11}	2×10^{-4}
		I	8×10^{-10}	7×10^{-3}	3×10^{-11}	2×10^{-4}
	Pa 231	S	1×10^{-12}	3×10^{-5}	4×10^{-14}	9×10^{-7}
		I	1×10^{-10}	8×10^{-4}	4×10^{-12}	2×10^{-5}
	Pa 233	S	6×10^{-7}	4×10^{-3}	2×10^{-8}	1×10^{-4}
		I	2×10^{-7}	3×10^{-3}	6×10^{-9}	1×10^{-4}
Radium (88)	Ra 223	S	2×10^{-9}	2×10^{-5}	6×10^{-11}	7×10^{-7}
		I	2×10^{-10}	1×10^{-4}	8×10^{-12}	4×10^{-6}

APPENDIX B—CONCENTRATIONS IN AIR AND WATER ABOVE NATURAL BACKGROUND—Continued

[See footnotes at end of Appendix B]

Element (atomic number)	Isotope [1]		Table I		Table II	
			Col. 1—Air (μCi/ml)	Col. 2—Water (μCi/ml)	Col. 1—Air (μCi/ml)	Col. 2—Water (μCi/ml)
	Ra 224	S	5×10^{-9}	7×10^{-6}	2×10^{-10}	2×10^{-7}
		I	7×10^{-10}	2×10^{-4}	2×10^{-11}	5×10^{-6}
	Ra 226	S	3×10^{-11}	4×10^{-7}	3×10^{-12}	3×10^{-8}
		I	5×10^{-11}	9×10^{-4}	2×10^{-12}	3×10^{-5}
	Ra 228	S	7×10^{-11}	8×10^{-7}	2×10^{-12}	3×10^{-8}
		I	4×10^{-11}	7×10^{-4}	1×10^{-12}	3×10^{-5}
Radon (86)	Rn 220	S	3×10^{-7}		1×10^{-8}	
	Rn 222 [1]		3×10^{-8}		3×10^{-9}	
Rhenium (75)	Re 183	S	3×10^{-6}	2×10^{-2}	9×10^{-8}	6×10^{-4}
		I	2×10^{-7}	8×10^{-3}	5×10^{-9}	3×10^{-4}
	Re 186	S	6×10^{-7}	3×10^{-3}	2×10^{-8}	9×10^{-5}
		I	2×10^{-7}	1×10^{-3}	8×10^{-9}	5×10^{-5}
	Re 187	S	9×10^{-6}	7×10^{-2}	3×10^{-7}	3×10^{-3}
		I	5×10^{-7}	4×10^{-2}	2×10^{-8}	2×10^{-3}
	Re 188	S	4×10^{-7}	2×10^{-3}	1×10^{-8}	6×10^{-5}
		I	2×10^{-7}	9×10^{-4}	6×10^{-9}	3×10^{-5}
Rhodium (45)	Rh 103m	S	8×10^{-5}	4×10^{-1}	3×10^{-6}	1×10^{-2}
		I	6×10^{-5}	3×10^{-1}	2×10^{-6}	1×10^{-2}
	Rh 105	S	8×10^{-7}	4×10^{-3}	3×10^{-8}	1×10^{-4}
		I	5×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
Rubidium (37)	Rb 86	S	3×10^{-7}	2×10^{-3}	1×10^{-8}	7×10^{-5}
		I	7×10^{-8}	7×10^{-4}	2×10^{-9}	2×10^{-5}
	Rb 87	S	5×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
		I	7×10^{-8}	5×10^{-3}	2×10^{-9}	2×10^{-4}
Ruthenium (44)	Ru 97	S	2×10^{-6}	1×10^{-2}	8×10^{-8}	4×10^{-4}
		I	2×10^{-6}	1×10^{-2}	6×10^{-8}	3×10^{-4}
	Ru 103	S	5×10^{-7}	2×10^{-3}	2×10^{-8}	8×10^{-5}
		I	8×10^{-8}	2×10^{-3}	3×10^{-9}	8×10^{-5}
	Ru 105	S	7×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
		I	5×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
	Ru 106	S	8×10^{-8}	4×10^{-4}	3×10^{-9}	1×10^{-5}
		I	6×10^{-9}	3×10^{-4}	2×10^{-10}	1×10^{-5}
Samarium (62)	Sm 147	S	7×10^{-11}	2×10^{-3}	2×10^{-12}	6×10^{-5}
		I	3×10^{-10}	2×10^{-3}	9×10^{-12}	7×10^{-5}
	Sm 151	S	6×10^{-8}	1×10^{-2}	2×10^{-9}	4×10^{-4}
		I	1×10^{-7}	1×10^{-2}	5×10^{-9}	4×10^{-4}
	Sm 153	S	5×10^{-7}	2×10^{-3}	2×10^{-8}	8×10^{-5}
		I	4×10^{-7}	2×10^{-3}	1×10^{-8}	8×10^{-5}
Scandium (21)	Sc 46	S	2×10^{-7}	1×10^{-3}	8×10^{-9}	4×10^{-5}
		I	2×10^{-8}	1×10^{-3}	8×10^{-10}	4×10^{-5}
	Sc 47	S	6×10^{-7}	3×10^{-3}	2×10^{-8}	9×10^{-5}
		I	5×10^{-7}	3×10^{-3}	2×10^{-8}	9×10^{-5}
	Sc 48	S	2×10^{-7}	8×10^{-4}	6×10^{-9}	3×10^{-5}
		I	1×10^{-7}	8×10^{-4}	5×10^{-9}	3×10^{-5}
Selenium 34)	Se 75	S	1×10^{-6}	9×10^{-3}	4×10^{-8}	3×10^{-4}
		I	1×10^{-7}	8×10^{-3}	4×10^{-9}	3×10^{-4}
Silicon (14)	Si 31	S	6×10^{-6}	3×10^{-2}	2×10^{-7}	9×10^{-4}
		I	1×10^{-6}	6×10^{-3}	3×10^{-8}	2×10^{-4}
Silver (47)	Ag 105	S	6×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
		I	8×10^{-8}	3×10^{-3}	3×10^{-9}	1×10^{-4}
	Ag 110m	S	2×10^{-7}	9×10^{-4}	7×10^{-9}	3×10^{-5}
		I	1×10^{-8}	9×10^{-4}	3×10^{-10}	3×10^{-5}
	Ag 111	S	3×10^{-7}	1×10^{-3}	1×10^{-8}	4×10^{-5}
		I	2×10^{-7}	1×10^{-3}	8×10^{-9}	4×10^{-5}
Sodium (11)	Na 22	S	2×10^{-7}	1×10^{-3}	6×10^{-9}	4×10^{-5}
		I	9×10^{-9}	9×10^{-4}	3×10^{-10}	3×10^{-5}
	Na 24	S	1×10^{-6}	6×10^{-3}	4×10^{-8}	2×10^{-4}
		I	1×10^{-7}	8×10^{-4}	5×10^{-9}	3×10^{-5}
Strontium (38)	Sr 85m	S	4×10^{-5}	2×10^{-1}	1×10^{-6}	7×10^{-3}
		I	3×10^{-5}	2×10^{-1}	1×10^{-6}	7×10^{-3}
	Sr 85	S	2×10^{-7}	3×10^{-3}	8×10^{-9}	1×10^{-4}
		I	1×10^{-7}	5×10^{-3}	4×10^{-9}	2×10^{-4}
	Sr 89	S	3×10^{-8}	3×10^{-4}	3×10^{-10}	3×10^{-6}
		I	4×10^{-8}	8×10^{-4}	1×10^{-9}	3×10^{-5}
	Sr 90	S	1×10^{-9}	1×10^{-5}	3×10^{-11}	3×10^{-7}

APPENDIX B—CONCENTRATIONS IN AIR AND WATER ABOVE NATURAL BACKGROUND—Continued

[See footnotes at end of Appendix B]

Element (atomic number)	Isotope [1]		Table I		Table II	
			Col. 1—Air (μCi/ml)	Col. 2—Water (μCi/ml)	Col. 1—Air (μCi/ml)	Col. 2—Water (μCi/ml)
		I	5×10^{-9}	1×10^{-3}	2×10^{-10}	4×10^{-5}
	Sr 91	S	4×10^{-7}	2×10^{-3}	2×10^{-8}	7×10^{-5}
		I	3×10^{-7}	1×10^{-3}	9×10^{-9}	5×10^{-5}
	Sr 92	S	4×10^{-7}	2×10^{-3}	2×10^{-8}	7×10^{-5}
		I	3×10^{-7}	2×10^{-3}	1×10^{-8}	6×10^{-5}
Sulfur (16)	S 35	S	3×10^{-7}	2×10^{-3}	9×10^{-9}	6×10^{-5}
		I	3×10^{-7}	8×10^{-3}	9×10^{-9}	3×10^{-4}
Tantalum (73)	Ta 182	S	4×10^{-8}	1×10^{-3}	1×10^{-9}	4×10^{-5}
		I	2×10^{-8}	1×10^{-3}	7×10^{-10}	4×10^{-5}
Technetium (43)	Tc 96m	S	8×10^{-5}	4×10^{-1}	3×10^{-6}	1×10^{-2}
		I	3×10^{-5}	3×10^{-1}	1×10^{-6}	1×10^{-2}
	Tc 96	S	6×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
		I	2×10^{-7}	1×10^{-3}	8×10^{-9}	5×10^{-5}
	Tc 97m	S	2×10^{-6}	1×10^{-2}	8×10^{-8}	4×10^{-4}
		I	2×10^{-7}	5×10^{-3}	5×10^{-9}	2×10^{-4}
	Tc 97	S	1×10^{-5}	5×10^{-2}	4×10^{-7}	2×10^{-3}
		I	3×10^{-7}	2×10^{-2}	1×10^{-8}	8×10^{-4}
	Tc 99m	S	4×10^{-5}	2×10^{-1}	1×10^{-6}	6×10^{-3}
		I	1×10^{-5}	8×10^{-2}	5×10^{-7}	3×10^{-3}
	Tc 99	S	2×10^{-6}	1×10^{-2}	7×10^{-8}	3×10^{-4}
		I	6×10^{-8}	5×10^{-3}	2×10^{-9}	2×10^{-4}
Tellurium (52)	Te 125m	S	4×10^{-7}	5×10^{-3}	1×10^{-8}	2×10^{-4}
		I	1×10^{-7}	3×10^{-3}	4×10^{-9}	1×10^{-4}
	Te 127m	S	1×10^{-7}	2×10^{-3}	5×10^{-9}	6×10^{-5}
		I	4×10^{-8}	2×10^{-3}	1×10^{-9}	5×10^{-5}
	Te 127	S	2×10^{-6}	8×10^{-3}	6×10^{-8}	3×10^{-4}
		I	9×10^{-7}	5×10^{-3}	3×10^{-8}	2×10^{-4}
	Te 129m	S	8×10^{-8}	1×10^{-3}	3×10^{-9}	3×10^{-5}
		I	3×10^{-8}	6×10^{-4}	1×10^{-9}	2×10^{-5}
	Te 129	S	5×10^{-6}	2×10^{-2}	2×10^{-7}	8×10^{-4}
		I	4×10^{-6}	2×10^{-2}	1×10^{-7}	8×10^{-4}
	Te 131m	S	4×10^{-7}	2×10^{-3}	1×10^{-8}	6×10^{-5}
		I	2×10^{-7}	1×10^{-3}	6×10^{-9}	4×10^{-5}
	Te 132	S	2×10^{-7}	9×10^{-4}	7×10^{-9}	3×10^{-5}
		I	1×10^{-7}	6×10^{-4}	4×10^{-9}	2×10^{-5}
Terbium (65)	Tb 160	S	1×10^{-7}	1×10^{-3}	3×10^{-9}	4×10^{-5}
		I	3×10^{-8}	1×10^{-3}	1×10^{-9}	4×10^{-5}
Thallium (81)	Tl 200	S	3×10^{-6}	1×10^{-2}	9×10^{-8}	4×10^{-4}
		I	1×10^{-6}	7×10^{-3}	4×10^{-8}	2×10^{-4}
	Tl 201	S	2×10^{-6}	9×10^{-3}	7×10^{-8}	3×10^{-4}
		I	9×10^{-7}	5×10^{-3}	3×10^{-8}	2×10^{-4}
	Tl 202	S	8×10^{-7}	4×10^{-3}	3×10^{-8}	1×10^{-4}
		I	2×10^{-7}	2×10^{-3}	8×10^{-9}	7×10^{-5}
	Tl 204	S	6×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
		I	3×10^{-8}	2×10^{-3}	9×10^{-10}	6×10^{-5}
Thorium (90)	Th 227	S	3×10^{-10}	5×10^{-4}	1×10^{-11}	2×10^{-5}
		I	2×10^{-10}	5×10^{-4}	6×10^{-12}	2×10^{-5}
	Th 228	S	9×10^{-12}	2×10^{-4}	3×10^{-13}	7×10^{-6}
		I	6×10^{-12}	4×10^{-4}	2×10^{-13}	1×10^{-5}
	Th 230	S	2×10^{-12}	5×10^{-5}	8×10^{-14}	2×10^{-6}
		I	1×10^{-11}	9×10^{-4}	3×10^{-13}	3×10^{-5}
	Th 231	S	1×10^{-6}	7×10^{-3}	5×10^{-8}	2×10^{-4}
		I	1×10^{-6}	7×10^{-3}	4×10^{-8}	2×10^{-4}
	Th 232	S	3×10^{-11}	5×10^{-5}	1×10^{-12}	2×10^{-6}
		I	3×10^{-11}	1×10^{-3}	1×10^{-12}	4×10^{-5}
	Th natural	S	6×10^{-11}	6×10^{-5}	2×10^{-12}	2×10^{-6}
		I	6×10^{-11}	6×10^{-4}	2×10^{-12}	2×10^{-5}
	Th 234	S	6×10^{-8}	5×10^{-4}	2×10^{-9}	2×10^{-5}
		I	3×10^{-8}	5×10^{-4}	1×10^{-9}	2×10^{-5}
Thulium (69)	Tm 170	S	4×10^{-8}	1×10^{-3}	1×10^{-9}	5×10^{-5}
		I	3×10^{-8}	1×10^{-3}	1×10^{-9}	5×10^{-5}
	Tm 171	S	1×10^{-7}	1×10^{-2}	4×10^{-9}	5×10^{-4}
		I	2×10^{-7}	1×10^{-2}	8×10^{-9}	5×10^{-4}
Tin (50)	Sn 113	S	4×10^{-7}	2×10^{-3}	1×10^{-8}	9×10^{-5}
		I	5×10^{-8}	2×10^{-3}	2×10^{-9}	8×10^{-5}

APPENDIX B—CONCENTRATIONS IN AIR AND WATER ABOVE NATURAL BACKGROUND—Continued

[See footnotes at end of Appendix B]

Element (atomic number)	Isotope [1]		Table I Col. 1—Air (μCi/ml)	Table I Col. 2—Water (μCi/ml)	Table II Col. 1—Air (μCi/ml)	Table II Col. 2—Water (μCi/ml)
	Sn 125	S	1×10^{-7}	5×10^{-4}	4×10^{-9}	2×10^{-5}
		I	8×10^{-8}	5×10^{-4}	3×10^{-9}	2×10^{-5}
Tungsten (Wolfram) (74)	W 181	S	2×10^{-6}	1×10^{-2}	8×10^{-8}	4×10^{-4}
		I	1×10^{-7}	1×10^{-2}	4×10^{-9}	3×10^{-4}
	W 185	S	8×10^{-7}	4×10^{-3}	3×10^{-8}	1×10^{-4}
		I	1×10^{-7}	3×10^{-3}	4×10^{-9}	1×10^{-4}
	W 187	S	4×10^{-7}	2×10^{-3}	2×10^{-8}	7×10^{-5}
		I	3×10^{-7}	2×10^{-3}	1×10^{-8}	6×10^{-5}
Uranium (92)	U 230	S	3×10^{-10}	1×10^{-4}	1×10^{-11}	5×10^{-6}
		I	1×10^{-10}	1×10^{-4}	4×10^{-12}	5×10^{-6}
	U 232	S	1×10^{-10}	8×10^{-4}	3×10^{-12}	3×10^{-5}
		I	3×10^{-11}	8×10^{-4}	9×10^{-13}	3×10^{-5}
	U 233	S	5×10^{-10}	9×10^{-4}	2×10^{-11}	3×10^{-5}
		I	1×10^{-10}	9×10^{-4}	4×10^{-12}	3×10^{-5}
	U 234	S[4]	6×10^{-10}	9×10^{-4}	2×10^{-11}	3×10^{-5}
		I	1×10^{-10}	9×10^{-4}	4×10^{-12}	3×10^{-5}
	U 235	S[4]	5×10^{-10}	8×10^{-4}	2×10^{-11}	3×10^{-5}
		I	1×10^{-10}	8×10^{-4}	4×10^{-12}	3×10^{-5}
	U 236	S	6×10^{-10}	1×10^{-3}	2×10^{-11}	3×10^{-5}
		I	1×10^{-10}	1×10^{-3}	4×10^{-12}	3×10^{-5}
	U 238	S[4]	7×10^{-11}	1×10^{-3}	3×10^{-12}	4×10^{-5}
		I	1×10^{-10}	1×10^{-3}	5×10^{-12}	4×10^{-5}
	U 240	S	2×10^{-7}	1×10^{-3}	8×10^{-9}	3×10^{-5}
		I	2×10^{-7}	1×10^{-3}	6×10^{-9}	3×10^{-5}
	U-natural	S[4]	1×10^{-10}	1×10^{-3}	5×10^{-12}	3×10^{-5}
		I	1×10^{-10}	1×10^{-3}	5×10^{-12}	3×10^{-5}
Vanadium (23)	V 48	S	2×10^{-7}	9×10^{-4}	6×10^{-9}	3×10^{-5}
		I	6×10^{-8}	8×10^{-4}	2×10^{-9}	3×10^{-5}
Xenon (54)	Xe 131m	Sub	2×10^{-5}		4×10^{-7}	
	Xe 133	Sub	1×10^{-5}		3×10^{-7}	
	Xe 133m	Sub	1×10^{-5}		3×10^{-7}	
	Xe 135	Sub	4×10^{-6}		1×10^{-7}	
Ytterbium (70)	Yb 175	S	7×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
		I	6×10^{-7}	3×10^{-3}	2×10^{-8}	1×10^{-4}
Yttrium (39)	Y 90	S	1×10^{-7}	6×10^{-4}	4×10^{-9}	2×10^{-5}
		I	1×10^{-7}	6×10^{-4}	3×10^{-9}	2×10^{-5}
	Y 91m	S	2×10^{-5}	1×10^{-1}	8×10^{-7}	3×10^{-3}
		I	2×10^{-5}	1×10^{-1}	6×10^{-7}	3×10^{-3}
	Y 91	S	4×10^{-8}	8×10^{-4}	1×10^{-9}	3×10^{-5}
		I	3×10^{-8}	8×10^{-4}	1×10^{-9}	3×10^{-5}
	Y 92	S	4×10^{-7}	2×10^{-3}	1×10^{-8}	6×10^{-5}
		I	3×10^{-7}	2×10^{-3}	1×10^{-8}	6×10^{-5}
	Y 93	S	2×10^{-7}	8×10^{-4}	6×10^{-9}	3×10^{-5}
		I	1×10^{-7}	8×10^{-4}	5×10^{-9}	3×10^{-5}
Zinc (30)	Zn 65	S	1×10^{-7}	3×10^{-3}	4×10^{-9}	1×10^{-4}
		I	6×10^{-8}	5×10^{-3}	2×10^{-9}	2×10^{-4}
	Zn 69m	S	4×10^{-7}	2×10^{-3}	1×10^{-8}	7×10^{-5}
		I	3×10^{-7}	2×10^{-3}	1×10^{-8}	6×10^{-5}
	Zn 69	S	7×10^{-6}	5×10^{-2}	2×10^{-7}	2×10^{-3}
		I	9×10^{-6}	5×10^{-2}	3×10^{-7}	2×10^{-3}
Zirconium (40)	Zr 93	S	1×10^{-7}	2×10^{-2}	4×10^{-9}	8×10^{-4}
		I	3×10^{-7}	2×10^{-2}	1×10^{-8}	8×10^{-4}
	Zr 95	S	1×10^{-7}	2×10^{-3}	4×10^{-9}	6×10^{-5}
		I	3×10^{-8}	2×10^{-3}	1×10^{-9}	6×10^{-5}
	Zr 97	S	1×10^{-7}	5×10^{-4}	4×10^{-9}	2×10^{-5}
		I	9×10^{-8}	5×10^{-4}	3×10^{-9}	2×10^{-5}
Any single radionuclide not listed above with decay mode other than alpha emission or spontaneous fission and with radioactive half-life less than 2 hours		Sub	1×10^{-6}		3×10^{-8}	

APPENDIX B—CONCENTRATIONS IN AIR AND WATER ABOVE NATURAL BACKGROUND—Continued

[See footnotes at end of Appendix B]

Element (atomic number)	Isotope [1]		Table I		Table II	
			Col. 1—Air (μCi/ml)	Col. 2—Water (μCi/ml)	Col. 1—Air (μCi/ml)	Col. 2—Water (μCi/ml)
Any single radionuclide not listed above with decay mode other than alpha emission or spontaneous fission and with radioactive half-life greater than 2 hours			3×10^{-9}	9×10^{-5}	1×10^{-10}	3×10^{-6}
Any single radionuclide not listed above, which decays by alpha emission or spontaneous fission			6×10^{-13}	4×10^{-7}	2×10^{-14}	3×10^{-8}

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[1] Soluble (S); Insoluble (I).

[2] "Sub" means that values given are for submersion in a semispherical infinite cloud of airborne material.

[3] These radon concentrations are appropriate for protection from radon-222 combined with its short-lived daughters. Alternatively, the value in Table I may be replaced by one-third (⅓) "working level." (A "working level" is defined as any combination of short-lived radon-222 daughters, polonium-218, lead-214, bismuth-214 and polonium-214, in one liter of air, without regard to the degree of equilibrium, that will result in the ultimate emission of 1.3×10^{5} MeV of alpha particle energy.) The Table II value may be replaced by one-thirtieth (1/30) of a "working level." The limit on radon-222 concentrations in restricted areas may be based on an annual average.

[4] For soluble mixtures of U-238, U-234 and U-235 in air chemical toxicity may be the limiting factor. If the percent by weight (enrichment) of U-235 is less than 5, the concentration value for a 40-hour workweek, Table I, is 0.2 milligrams uranium per cubic meter of air average. For any enrichment, the product of the average concentration and time of exposure during a 40-hour workweek shall not exceed 8×10^{-3} SA μCi-hr/ml, where SA is the specific activity of the uranium inhaled. The concentration value for Table II is 0.007 milligrams uranium per cubic meter of air. The specific activity for natural uranium is 6.77×10^{-7} curies per gram U. The specific activity for other mixtures of U-238, U-235 and U-234, if not known, shall be:

$SA = 3.6 \times 10^{-7}$ curies/gram U U-depleted

$SA = (0.4 + 0.38 E + 0.0034 E^2) 10^{-6}$ $E \geq 0.72$

where E is the percentage by weight of U-235, expressed as percent.

NOTE: In any case where there is a mixture in air or water of more than one radionuclide, the limiting values for purposes of this Appendix should be determined as follows:

1. If the identity and concentration of each radionuclide in the mixture are known, the limiting values should be derived as follows: Determine, for each radionuclide in the mixture, the ratio between the quantity present in the mixture and the limit otherwise established in Appendix B for the specific radionuclide when not in a mixture. The sum of such ratios for all the radionuclides in the mixture may not exceed "1" (i.e., "unity").

EXAMPLE: If radionuclides A, B, and C are present in concentrations C_A, C_B, and C_C, and if the applicable MPC's, are MPC_A, and MPC_B, and MPC_C respectively, then the concentrations shall be limited so that the following relationship exists:

$(C_A/MPC_A) + (C_B/MPC_B) + (C_C/MPC_C) \leq 1$

2. If either the identity or the concentration of any radionuclide in the mixture is not known, the limiting values for purposes of Appendix B shall be:

a. For purposes of Table I, Col. 1—6×10^{-13}
b. For purposes of Table I, Col. 2—4×10^{-7}
c. For purposes of Table II, Col. 1—2×10^{-14}
d. For purposes of Table II, Col. 2—3×10^{-8}

3. If any of the conditions specified below are met, the corresponding values specified below may be used in lieu of those specified in paragraph 2 above.

a. If the identity of each radionuclide in the mixture is known but the concentration of one or more of the radionuclides in the mixture is not known the concentration limit for the mixture is the limit specified in Appendix "B" for the radionuclide in the mixture having the lowest concentration limit, or

b. If the identity of each radionuclide in the mixture is not known, but it is known that certain radionuclides specified in Appendix "B" are not present in the mixture, the concentration limit for the mixture is the lowest concentration limit specified in Appendix "B" for any radionuclide which is not known to be absent from the mixture, or

c. Element (atomic number) and isotope	Table I		Table II	
	Col. 1—Air (μCi/ml)	Col. 2—Water (μCi/ml)	Col. 1—Air (μCi/ml)	Col. 2—Water (μCi/ml)
If it is known that Sr 90, I 125, I 126, I 129, I 131 (I 133, Table II only), Pb 210, Po 210, At 211, Ra 223, Ra 224, Ra 226, Ac 227, Ra 228, Th 230, Pa 231, Th 232, Th-nat, Cm 248, Cf 254, and Fm 256 are not present		9×10^{-5}		3×10^{-6}
If it is known that Sr 90, I 125, I 126, I 129 (I 131, I 133, Table II only), Pb 210, Po 210, Ra 223, Ra 226, Ra 228, Pa 231, Th-nat, Cm 248, Cf 254, and Fm 256 are not present		6×10^{-5}		2×10^{-6}
If it is known that Sr 90, I 129 (I 125, I 126, I 131, Table II only), Pb 210, Ra 226, Ra 228, Cm 248, and Cf 254 are not present		2×10^{-5}		6×10^{-7}
If it is known that (I 129, Table II only), Ra 226, and Ra 228 are not present		3×10^{-6}		1×10^{-7}
If it is known that alpha-emitters and Sr 90, I 129, Pb 210, Ac 227, Ra 228, Pa 230, Pu 241, and Bk 249 are not present	3×10^{-9}		1×10^{-10}	

c. Element (atomic number) and isotope	Table I		Table II	
	Col. 1—Air (µCi/ml)	Col. 2—Water (µCi/ml)	Col. 1—Air (µCi/ml)	Col. 2—Water (µCi/ml)
If it is known that alpha-emitters and Pb 210, Ac 227, Ra 228, and Pu 241 are not present	3×10^{-10}		1×10^{-11}	
If it is known that alpha-emitters and Ac 227 are not present	3×10^{-11}		1×10^{-12}	
If it is known that Ac 227, Th 230, Pa 231, Pu 238, Pu 239, Pu 240, Pu 242, Pu 244, Cm 248, Cf 249 and Cf 251 are not present	3×10^{-12}		1×10^{-13}	

4. If a mixture of radionuclides consists of uranium and its daughters in ore dust prior to chemical separation of the uranium from the ore, the values specified below may be used for uranium and its daughters through radium-226, instead of those from paragraphs 1, 2, or 3 above.

a. For purposes of Table I, Col. 1—1×10^{-10} µCi/ml gross alpha activity; or 5×10^{-11} µCi/ml natural uranium or 75 micrograms per cubic meter of air natural uranium.

b. For purposes of Table II, Col. 1—3×10^{-12} µCi/ml gross alpha activity; 2×10^{-12} µCi/ml natural uranium; or 3 micrograms per cubic meter of air natural uranium.

5. For purposes of this note, a radionuclide may be considered as not present in a mixture if (a) the ratio of the concentration of that radionuclide in the mixture (C_A) to the concentration limit for that radionuclide specified in Table II of Appendix "B" (MPC_A) does not exceed 1/10, (i.e. $C_A/MPC_A \leq 1/10$) and (b) the sum of such ratios for all the radionuclides considered as not present in the mixture does not exceed 1/4 i.e.

$(C_A/MPC_A + C_B/MPC_B + \ldots \leq 1/4)$

[25 FR 10914, Nov. 17, 1960, as amended at 25 FR 13953, Dec. 30, 1960; 26 FR 11046, Nov. 25, 1961; 29 FR 14435, Oct. 21, 1964; 30 FR 15801, Dec. 22, 1965; 31 FR 86, Jan. 5, 1966; 37 FR 23319, Nov. 2, 1972; 38 FR 29314, Oct. 24, 1973; 39 FR 23990, June 28, 1974; 39 FR 25463, July 11, 1974; 39 FR 27121, July 25, 1974; 40 FR 50705, Oct. 31, 1975]

APPENDIX C

Material	*Microcuries*
Americium-241	.01
Antimony-122	100
Antimony-124	10
Antimony-125	10
Arsenic-73	100
Arsenic-74	10
Arsenic-76	10
Arsenic-77	100
Barium-131	10
Barium-133	10
Barium-140	10
Bismuth-210	1
Bromine-82	10
Cadmium-109	10
Cadmium-115m	10
Cadmium-115	100
Calcium-45	10
Calcium-47	10
Carbon-14	100
Cerium-141	100
Cerium-143	100
Cerium-144	1
Cesium-131	1,000
Cesium-134m	100
Cesium-134	1
Cesium-135	10
Cesium-136	10
Cesium-137	10
Chlorine-36	10
Chlorine-38	10
Chromium-51	1,000
Cobalt-58m	10
Cobalt-58	10
Cobalt-60	1
Copper-64	100
Dysprosium-165	10
Dysprosium-166	100

APPENDIX C—Continued

Material	*Microcuries*
Erbium-169	100
Erbium-171	100
Europium-152 9.2 h	100
Europium-152 13 yr	1
Europium-154	1
Europium-155	10
Fluorine-18	1,000
Gadolinium-153	10
Gadolinium-159	100
Gallium-72	10
Germanium-71	100
Gold-198	100
Gold-199	100
Hafnium-181	10
Holmium-166	100
Hydrogen-3	1,000
Indium-113m	100
Indium-114m	10
Indium-115m	100
Indium-115	10
Iodine-125	1
Iodine-126	1
Iodine-129	0.1
Iodine-131	1
Iodine-132	10
Iodine-133	1
Iodine-134	10
Iodine-135	10
Iridium-192	10
Iridium-194	100
Iron-55	100
Iron-59	10
Krypton-85	100
Krypton-87	10
Lanthanum-140	10
Lutetium-177	100
Manganese-52	10
Manganese-54	10

APPENDIX C—Continued

Material	*Microcuries*
Manganese-56	10
Mercury-197m	100
Mercury-197	100
Mercury-203	10
Molybdenum-99	100
Neodymium-147	100
Neodymium-149	100
Nickel-59	100
Nickel-63	10
Nickel-65	100
Niobium-93m	10
Niobium-95	10
Niobium-97	10
Osmium-185	10
Osmium-191m	100
Osmium-191	100
Osmium-193	100
Palladium-103	100
Palladium-109	100
Phosphorus-32	10
Platinum-191	100
Platinum-193m	100
Platinum-193	100
Platinum-197m	100
Platinum-197	100
Plutonium-239	.01
Polonium-210	0.1
Potassium-42	10
Praseodymium-142	100
Praseodymium-143	100
Promethium-147	10
Promethium-149	10
Radium-226	.01
Rhenium-186	100
Rhenium-188	100
Rhodium-103m	100
Rhodium-105	100
Rubidium-86	10
Rubidium-87	10
Ruthenium-97	100
Ruthenium-103	10
Ruthenium-105	10
Ruthenium-106	1
Samarium-151	10
Samarium-153	100
Scandium-46	10
Scandium-47	100
Scandium-48	10
Selenium-75	10
Silicon-31	100
Silver-105	10
Silver-110m	1
Silver-111	100
Sodium-24	10
Strontium-85	10
Strontium-89	1
Strontium-90	0.1
Strontium-91	10
Strontium-92	10
Sulphur-35	100
Tantalum-182	10
Technetium-96	10
Technetium-97m	100
Technetium-97	100
Technetium-99m	100
Technetium-99	10
Tellurium-125m	10

APPENDIX C—Continued

Material	*Microcuries*
Tellurium-127m	10
Tellurium-127	100
Tellurium-129m	10
Tellurium-129	100
Tellurium-131m	10
Tellurium-132	10
Terbium-160	10
Thallium-200	100
Thallium-201	100
Thallium-202	100
Thallium-204	10
Thorium (natural) [1]	100
Thulium-170	10
Thulium-171	10
Tin-113	10
Tin-125	10
Tungsten-181	10
Tungsten-185	10
Tungsten-187	100
Uranium (natural) [2]	100
Uranium-233	.01
Uranium-234—Uranium-235	.01
Vanadium-48	10
Xenon-131m	1,000
Xenon-133	100
Xenon-135	100
Ytterbium-175	100
Yttrium-90	10
Yttrium-91	10
Yttrium-92	100
Yttrium-93	100
Zinc-65	10
Zinc-69m	100
Zinc-69	1,000
Zirconium-93	10
Zirconium-95	10
Zirconium-97	10
Any alpha emitting radionuclide not listed above or mixtures of alpha emitters of unknown composition	.01
Any radionuclide other than alpha emitting radionuclides, not listed above or mixtures of beta emitters of unknown composition	.1

[1] Based on alpha disintegration rate of Th-232, Th-230 and their daughter products.

[2] Based on alpha disintegration rate of U-238, U-234, and U-235.

NOTE: For purposes of § 20.303, where there is involved a combination of isotopes in known amounts, the limit for the combination should be derived as follows: Determine, for each isotope in the combination, the ratio between the quantity present in the combination and the limit otherwise established for the specific isotope when not in combination. The sum of such ratios for all the isotopes in the combination may not exceed "1" (i.e., "unity").

[35 FR 6425, Apr. 22, 1970, as amended at 36 FR 16898, Aug. 26, 1971; 38 FR 29314, Oct. 24, 1973; 39 FR 23991, June 28, 1974; 45 FR 71763, Oct. 30, 1980]

APPENDIX D—U.S. NUCLEAR REGULATORY COMMISSION REGIONAL OFFICES

	Addresses	Telephone (24 hours)
Region I: Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.	USNRC, 475 Allendale Road, King of Prussia, PA 19406.	(215) 337-5000 (FTS) 346-5000
Region II: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, Puerto Rico, South Carolina, Tennessee, Virginia, Virgin Islands, and West Virginia.	USNRC, 101 Marietta Street, NW, Suite 2900, Atlanta, GA 30323.	(404) 331-4503 (FTS) 242-4503
Region III: Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin.	USNRC, 799 Roosevelt Road, Glen Ellyn, IL 60137.	(708) 790-5500 (FTS) 3[illegible]-5500
Region IV: Arkansas, Colorado, Idaho, Kansas, Louisiana, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah, and Wyoming.	USNRC, 611 Ryan Plaza Drive, Suite 1000, Arlington, TX 76011.	(817) 86[illegible]-8100 (FTS) 728-8100
Region IV: Field Office	USNRC, Region IV Uranium Recovery Field Office, 730 Simms Street, P.O. Box 25325, Denver, CO 80225.	([illegible]03) 236-2805 (FTS) 776-2805
Region V: Alaska, Arizona, California, Hawaii, Nevada, Oregon, Pacific Trust Territories, and Washington.	USNRC, 1450 Maria Lane, Suite 210, Walnut Creek, CA 94596.	(415) 943-3700 (FTS) 463-3700

[49 FR 47823, Dec. 7, 1984, as amended at 50 FR 46631, Nov. 12, 1985; 51 FR 35500, Oct. 6, 1986; 53 FR 3862, Feb. 10, 1988; 54 FR 42288, Oct. 16, 1989]

PART 21—REPORTING OF DEFECTS AND NONCOMPLIANCE

GENERAL PROVISIONS

Sec.
21.1 Purpose.
21.2 Scope.
21.3 Definitions.
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21.5 Communications.
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21.21 Notification of failure to comply or existence of a defect.

PROCUREMENT DOCUMENTS

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21.41 Inspections.
21.51 Maintenance of records.

ENFORCEMENT

21.61 Failure to notify.

AUTHORITY: Sec. 161, 68 Stat. 948, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2201, 2282); secs. 201, as amended, 206, 88 Stat. 1242, as amended, 1246 (42 U.S.C. 5841, 5846).

Sec. 21.2 also issued under secs. 135, 141, Pub. L. 97-425, 96 Stat. 2232, 2241 (42 U.S.C. 10155, 10161).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273); §§ 21.6, 21.21(a) and 21.31 are issued under sec. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201(b)); and §§ 21.21, 21.41 and 21.51 are isused under sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

SOURCE: 42 FR 28893, June 6, 1977, unless otherwise noted.

GENERAL PROVISIONS

§ 21.1 Purpose.

The regulations in this part establish procedures and requirements for implementation of section 206 of the Energy Reorganization Act of 1974. That section requires any individual director or responsible officer of a firm constructing, owning, operating or supplying the components of any facility or activity which is licensed or otherwise regulated pursuant to the Atomic Energy Act of 1954, as amended, or the Energy Reorganization Act of 1974, who obtains information reasonably indicating: (a) That the facility, activity or basic component supplied to such facility or activity fails to comply with the Atomic Energy Act of 1954, as amended, or any applicable rule, regulation, order, or license of the Commission relating to substantial safety hazards or (b) that the facility, activity, or basic component supplied to such facility or activity contains defects, which could create a substantial safety hazard, to immediately notify the Commission of such failure to comply or such defect, unless he has actual knowledge that the Commission has been adequately informed of such defect or failure to comply.

§ 21.2 Scope.

The regulations in this part apply, except as specifically provided otherwise in Parts 31, 34, 35, 39, 40, 60, 61, 70, or 72 of this chapter, to each individual, partnership, corporation, or other entity licensed pursuant to the regulations in this chapter to possess, use, and/or transfer within the United States source material, byproduct material, special nuclear material, and/or spent fuel and high-level radioactive waste, or to construct, manufacture, possess, own, operate and/or transfer within the United States, any production or utilization facility, or independent spent fuel storage installation (ISFSI) or monitored retrievable storage installation (MRS), and to each director (see § 21.3(f)) and responsible officer (see § 21.3(j)) of such a licensee. The regulations in this part apply also to each individual, corporation, partnership or other entity doing business within the United States, and each director and responsible officer of such organization that constructs (see § 21.3(c)) a production or utilization facility licensed for manufacture, construction or operation (see § 21.3(h)) pursuant to Part 50 of this chapter, an independent spent fuel storage installation (ISFSI) for the storage of spent fuel licensed pursuant to Part 72 of this chapter or a monitored retrievable storage installation (MRS) for the storage of spent fuel or high-level radioactive waste licensed pursuant to Part 72 of this chapter, or supplies (see § 21.3(1)) basic components (see § 21.3(a)) for a facility or activity licensed, other than for export, under Parts 30, 39, 40, 50, 60, 61, 70, 71, or 72 of this chapter. Nothing in these regulations should be deemed to preclude either an individual or a manufacturer/supplier of a commerical grade item (see § 21.3(a-1)) not subject to the regulations in this part from reporting to the Commission a known or suspected defect or failure to comply and, as authorized by law, the identity of anyone so reporting will be withheld from disclosure.[1]

[53 FR 31680, Aug. 19, 1988, as amended at 54 FR 52342, Dec. 21, 1989]

§ 21.3 Definitions.

As used in this part:

(a)(1) "Basic component," when applied to nuclear power reactors means a plant structure, system, component or part thereof necessary to assure (i) the integrity of the reactor coolant pressure boundary, (ii) the capability to shut down the reactor and maintain it in a safe shutdown condition, or (iii) the capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in § 100.11 of this chapter.

(2) "Basic component," when applied to other facilities and when applied to other activities licensed pursuant to Parts 30, 40, 50, 60, 61, 70, 71, or 72 of this chapter, means a component, structure, system, or part thereof that is directly procured by the licensee of a facility or activity subject to the regulations in this part and in which a defect (see § 21.3(d)) or failure to comply with any applicable regulation in this chapter, order, or license issued by the Commission could create a substantial safety hazard (see § 21.3(k)).

(3) In all cases "basic component" includes design, inspection, testing, or consulting services important to safety that are associated with the component hardware, whether these services are performed by the component supplier or others.

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[1] NRC Regional Officers will accept collect telephone calls from individuals who wish to speak to NRC representatives concerning nuclear safety-related problems. The location and telephone numbers (for nights and holidays as well as regular hours) are listed below:

Region:
I (Philadelphia)... (215) 337-5000
II (Atlanta)... (404) 331-4503
III (Chicago)... (708) 790-5500
IV (Dallas)... (817) 860-8100
IV Uranium Recovery Field Office (Denver)... (303) 236-2805
V (San Francisco)... (415) 943-3700

(4) A commercial grade item is not a part of a basic component until after dedication (see § 21.3(c-1)).

(a-1) "Commercial grade item" means an item that is (1) not subject to design or specification requirements that are unique to facilities or activities licensed pursuant to Parts 30, 40, 50, 60, 61, 70, 71, or 72 of this chapter and (2) used in applications other than facilities or activities licensed pursuant to Parts 30, 40, 50, 60, 61, 70, 71, or 72 of this chapter and (3) to be ordered from the manufacturer/supplier on the basis of specifications set forth in the manufacturer's published product description (for example a catalog).

(b) "Commission" means the Nuclear Regulatory Commission or its duly authorized representatives.

(c) "Constructing" or "construction" means the design, manufacture, fabrication, placement, erection, installation, modification, inspection, or testing of a facility or activity which is subject to the regulations in this part and consulting services related to the facility or activity that are important to safety.

(c-1) "Dedication" of a commercial grade item occurs after receipt when that item is designated for use as a basic component.

(d) "Defect" means:

(1) A deviation (see § 21.3(e)) in a basic component delivered to a purchaser for use in a facility or an activity subject to the regulations in this part if, on the basis of an evaluation (see § 21.3(g)), the deviation could create a substantial safety hazard; or

(2) The installation, use, or operation of a basic component containing a defect as defined in paragraph (d)(1) of this section; or

(3) A deviation in a portion of a facility subject to the construction permit or manufacturing licensing requirements of Part 50 of this chapter provided the deviation could, on the basis of an evaluation, create a substantial safety hazard and the portion of the facility containing the deviation has been offered to the purchaser for acceptance; or

(4) A condition or circumstance involving a basic component that could contribute to the exceeding of a safety limit, as defined in the technical specifications of a license for operation issued pursuant to Part 50 of this chapter.

(e) "Deviation" means a departure from the technical requirements included in a procurement document (see § 21.3(i)).

(f) "Director" means an individual appointed or elected according to law who is authorized to manage and direct the affairs of a corporation, partnership or other entity. In the case of an individual proprietorship, "director" means the individual.

(g) "Evaluation" means the process accomplished by or for a licensee to determine whether a particular deviation could create a substantial safety hazard.

(h) "Operating" or "operation" means the operation of a facility or the conduct of a licensed activity which is subject to the regulations in this part and consulting services related to operations that are important to safety.

(i) "Procurement document" means a contract that defines the requirements which facilities or basic components must meet in order to be considered acceptable by the purchaser.

(j) "Responsible officer" means the president, vice-president or other individual in the organization of a corporation, partnership, or other entity who is vested with executive authority over activities subject to this part.

(k) "Substantial safety hazard" means a loss of safety function to the extent that there is a major reduction in the degree of protection provided to public health and safety for any facility or activity licensed, other than for export, pursuant to Parts 30, 40, 50, 60, 61, 70, 71, or 72 of this chapter.

(l) "Supplying" or "supplies" means contractually responsible for a basic component used or to be used in a facility or activity which is subject to the regulations in this part.

[42 FR 28893, June 6, 1977; 42 FR 36803, July 18, 1977, as amended at 43 FR 48622, Oct. 19, 1978; 46 FR 58283, Dec. 1, 1981; 47 FR 57480, Dec. 27, 1982]

§ 21.4 Interpretations.

Except as specifically authorized by the Commission in writing, no interpretation of the meaning of the regulations in this part by any officer or employee of the Commission other than a written interpretation by the General Counsel will be recognized to be binding upon the Commission.

§ 21.5 Communications.

Except where otherwise specified in this part, all communications and reports concerning the regulations in this part should be addressed to the Director, Office of Nuclear Reactor Regulation, or Director, Office of Nuclear Material Safety and Safeguards, as appropriate, U.S. Nuclear Regulatory Commission, Washington, DC 20555, or to the Administrator of a Regional Office at the address specified in Appendix D of Part 20 of this chapter. Communications and reports may be delivered in person at the Commission's offices at 2120 L Street, NW., Washington, DC, or at 11555 Rockville Pike, Rockville, Maryland.

[53 FR 6139, Mar. 1, 1988, as amended at 53 FR 43420, Oct. 27, 1988]

§ 21.6 Posting requirements.

(a) Each individual, partnership, corporation or other entity subject to the regulations in this part, shall post current copies of the following documents in a conspicuous position on any premises, within the United States where the activities subject to this part are conducted (1) the regulations in this part, (2) section 206 of the Energy Reorganization Act of 1974, and (3) procedures adopted pursuant to the regulations in this part.

(b) If posting of the regulations in this part or the procedures adopted pursuant to the regulations in this part is not practicable, the licensee or firm subject to the regulations in this part may, in addition to posting section 206, post a notice which describes the regulations/procedures, including the name of the individual to whom reports may be made, and states where they may be examined.

(c) The effective date of this section has been deferred until January 6, 1978.

§ 21.7 Exemptions.

The Commission may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this part as it determines are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest. Suppliers of commercial grade items are exempt from the provisions of this part to the extent that they supply commercial grade items.

[42 FR 28893, June 6, 1977, as amended at 43 FR 48622, Oct. 19, 1978]

§ 21.8 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). OMB has approved the information collection requirements contained in this part under control number 3150-0035.

(b) The approved information collection requirements contained in this part appear in §§ 21.21 and 21.51.

[49 FR 19624, May 9, 1984]

NOTIFICATION

§ 21.21 Notification of failure to comply or existence of a defect.

(a) Each individual, corporation, partnership or other entity subject to the regulations in this part shall adopt appropriate procedures to:

(1) Provide for: (i) Evaluating deviations or (ii) informing the licensee or purchaser of the deviation in order that the licensee or purchaser may cause the deviation to be evaluated unless the deviation has been corrected; and

(2) Assure that a director or responsible officer is informed if the construction or operation of a facility, or activity, or a basic component supplied for such facility or activity:

(i) Fails to comply with the Atomic Energy Act of 1954, as amended, or any applicable rule, regulation, order or license of the Commission relating to a substantial safety hazard, or

(ii) Contains a defect. The effective date of this paragraph has been deferred until January 6, 1978.

(b)(1) A director or responsible officer subject to the regulations of this part or a designated person shall notify the Commission when he obtains information reasonably indicating a failure to comply or a defect affecting (i) the construction or operation of a facility or an activity within the United States that is subject to the licensing requirements under Parts 30, 40, 50, 60, 61, 70, 71, or 72 of this chapter and that is within his organization's responsibility or (ii) a basic component that is within his organization's responsibility and is supplied for a facility or an activity within the United States that is subject to the licensing requirements under Parts 30, 40, 50, 60, 61, 70, 71, or 72 of this chapter. The above notification is not required if such individual has actual knowledge that the Commission has been adequately informed of such defect or such failure to comply.

(2) Initial notification required by this paragraph must be made within 2 days following receipt of the information. Notification must be made to the Director, Office of Nuclear Reactor Regulation, or Director, Office of Nuclear Material Safety and Safeguards, as appropriate, U.S. Nuclear Regulatory Commission, Washington, DC 20555, or to the Administrator of a Regional Office. If initial notification is by means other than written communication, a written report must be submitted to the appropriate Office within 5 days after the information is obtained. Three copies of each report must be submitted to the Director, Office of Nuclear Reactor Regulation, or Director, Office of Nuclear Material Safety and Safeguards, as appropriate.

(3) The written report required by this paragraph shall include, but need not be limited to, the following information, to the extent known.

(i) Name and address of the individual or individuals informing the Commission.

(ii) Identification of the facility, the activity, or the basic component supplied for such facility or such activity within the United States which fails to comply or contains a defect.

(iii) Identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect.

(iv) Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply.

(v) The date on which the information of such defect or failure to comply was obtained.

(vi) In the case of a basic component which contains a defect or fails to comply, the number and location of all such components in use at, supplied for, or being supplied for one or more facilities or activities subject to the regulations in this part.

(vii) The corrective action which has been, is being, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action.

(viii) Any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees.

(4) The director or responsible officer may authorize an individual to provide the notification required by this paragraph, provided that, this shall not relieve the director or responsible officer of his or her responsibility under this paragraph.

(c) Individuals subject to paragraph (b) of this section may be required by the Commission to supply additional information related to the defect or failure to comply.

[42 FR 28893, June 6, 1977, as amended at 46 FR 58283, Dec. 1, 1981; 47 FR 57480, Dec. 27, 1982; 52 FR 31611, Aug. 21, 1987]

PROCUREMENT DOCUMENTS

§ 21.31 Procurement documents.

Each individual, corporation, partnership or other entity subject to the regulations in this part shall assure that each procurement document for a facility, or a basic component issued by him, her or it on or after January 6, 1978 specifies, when applicable, that the provisions of 10 CFR Part 21 apply.

INSPECTIONS, RECORDS

§ 21.41 Inspections.

Each individual, corporation, partnership or other entity subject to the regulations in this part shall permit duly authorized representatives of the Commission, to inspect its records, premises, activities, and basic components as necessary to effectuate the purposes of this part.

§ 21.51 Maintenance of records.

(a) Each licensee of a facility or activity subject to the regulations in this part shall maintain such records in connection with the licensed facility or activity as may be required to assure compliance with the regulations in this part.

(b) Each individual, corporation, partnership, or other entity subject to the regulations in this part shall prepare records in connection with the designs, manufacture, fabrication, placement, erection, installation, modification, inspection, or testing of any facility, basic component supplied for any licensed facility or to be used in any licensed activity sufficient to assure compliance with the regulations in this part. After delivery of the facility or component and prior to the destruction of the records relating to evaluations (see § 21.3(g)) or notifications to the Commission (see § 21.21), such records shall be offered to the purchaser of the facility or component. If such purchaser determines any such records:

(1) Are not related to the creation of a substantial safety hazard, he may authorize such records to be destroyed, or

(2) Are related to the creation of a substantial safety hazard, he shall cause such records to be offered to the organization to which he supplies basic components or for which he constructs a facility or activity.

If such purchaser is unable to make the determination as required above then the responsibility for making the determination shall be transferred to the individual, corporation, partnership, or other entity subject to the regulations in this part that issued the procurement document to the purchaser. In the event that the determination cannot be made at that level then the responsibility shall be transferred in a similar manner to another individual, corporation, partnership, or other entity subject to the regulations in this part, until, if necessary, the licensee shall make the determination.

(c) Records that are prepared only for the purpose of assuring compliance with the regulations in this part and are not related to evaluations or notifications to the Commission may be destroyed after delivery of the facility or component.

(d) The effective date of the section has been deferred until January 6, 1978.

ENFORCEMENT

§ 21.61 Failure to notify.

Any director or responsible officer subject to the regulations in this part who knowingly and consciously fails to provide the notice required by § 21.21 shall be subject to a civil penalty equal to the amount provided by section 234 of the Atomic Energy Act of 1954, as amended.

[46 FR 13202, Feb. 20, 1981]

PART 25—ACCESS AUTHORIZATION FOR LICENSEE PERSONNEL

GENERAL PROVISIONS

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ACCESS AUTHORIZATIONS

25.15 Access permitted under "Q" or "L" access authorization.
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25.23 Notification of grant of access authorization.
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25.27 Reopening of cases in which requests for access authorizations are cancelled.
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CLASSIFIED VISITS

25.35 Classified visits.

VIOLATIONS

25.37 Violations.

APPENDIX TO PART 25—FEES FOR NRC ACCESS AUTHORIZATION

AUTHORITY: Secs. 145, 161, 68 Stat. 942, 948, as amended (42 U.S.C. 2165, 2201); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841); E.O. 10865, as amended, 3 CFR 1959-1963 COMP., p. 398 (50 U.S.C. 401, note); E.O. 12356, 47 FR 14874, Apr. 6, 1982.

Appendix A also issued under 96 Stat. 1051 (31 U.S.C. 9701).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273), §§ 25.13, 25.17(a), 25.33 (b) and (c) are issued under sec. 161i, 68 Stat. 949, as amended (42 U.S.C. 2201(i)); and §§ 25.13 and 25.33(b) are also issued under sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

SOURCE: 45 FR 14481, Mar. 5, 1980, unless otherwise noted.

GENERAL PROVISIONS

§ 25.1 Purpose.

This part establishes procedures for granting, reinstating, extending, transferring and terminating access authorizations of licensee personnel, licensee contractors or agents and other persons (e.g. individuals involved in adjudicatory procedures as set forth in 10 CFR Part 2, Subpart I) who may require access to information classified at the Secret and Confidential National Security Information and/or Restricted Data level.

§ 25.3 Scope.

The regulations in this part apply to licensees and others who may require access to National Security Information and/or Restricted Data related to a license or application for a license.

§ 25.5 Definitions.

Access authorization means an administrative determination that an individual (including a consultant) who is employed by or an applicant for employment with the NRC, NRC contractors, agents, and licensees of the NRC, or other person designated by the Executive Director for Operations, is eligible for a security clearance for access to Restricted Data or national security information.

Act means the Atomic Energy Act of 1954 (68 Stat. 919), as amended.

Commission means the Nuclear Regulatory Commission or its duly authorized representatives.

L access authorization means an access authorization granted by the Commission which is normally based on a national agency check and credit investigation (NAC&C) or national agency check, inquiries and credit investigation (NACIC) conducted by the Office of Personnel Management.

License means a license issued pursuant to 10 CFR Parts 50, 70, or 72.

Matter means documents or material.

National Security Information means information that has been determined pursuant to Executive Order 12356 or any predecessor order to require protection against unauthorized disclosure and that is so designated.

Need-to-know means a determination by persons having responsibility for classified information or matter, that a proposed recipient's access to such classified information or matter is necessary in the performance of his official, contractual, or licensee duties of employment under the cognizance of the Commission.

Person means (1) any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, government agency other than the Commission or the Department of Energy (DOE), except that the DOE shall be considered a person to the extent that its facilities are subject to the licensing and related regulatory authority of the Commission pursuant to section 202 of the Energy Reorganization Act of 1974 and sections 104, 105 and 202 of the Uranium Mill Tailings Radiation Control Act of 1978, any State or any political subdivision of, or any political entity within a State, any foreign government or nation or any political subdivision of any such government or nation, or other entity; and (2) any legal successor, representative, agent, or agency of the foregoing.

Q Access Authorization means an access authorization granted by the Commission based on a full field investigation conducted by the Office of Personnel Management, the Federal Bureau of Investigation, or other U.S. Government agency which conducts personnel security investigations.

Restricted Data means all data concerning design, manufacture or utilization of atomic weapons, the production of special nuclear material, or the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the Restricted Data category pursuant to section 142 of the Act.

[45 FR 14481, Mar. 5, 1980, as amended at 46 FR 58283, Dec. 1, 1981; 47 FR 38683, Sept. 2, 1982; 48 FR 24320, June 1, 1983; 50 FR 36984, Sept. 11, 1985; 55 FR 11574, Mar. 29, 1990]

§ 25.7 Interpretations.

Except as specifically authorized by the Commission in writing, no interpretation of the meaning of the regulations in this part by any officer or employee of the Commission other than a written interpretation by the General Counsel will be recognized to be binding upon the Commission.

§ 25.8 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). OMB has approved the information collection requirements contained in this part under control number 3150-0046.

(b) The approved information collection requirements contained in this part appear in §§ 25.11, 25.17, 25.21, 25.23, 25.25, 25.27, 25.29, 25.31, 25.33, and 25.35.

(c) This part contains information collection requirements in addition to those approved under the control number specified in paragraph (a) of this section. These information collection requirements and the control numbers under which they are approved are as follows:

(1) In § 25.17, SF-86 is approved under control number 3206-0007.

(2) In § 25.17, Form NRC-237 is approved under control number 3150-0050.

(3) In § 25.33, Form NRC-136 is approved under control number 3150-0049.

(4) In § 25.35, Form NRC-277 is approved under control number 3150-0051.

[49 FR 19624, May 9, 1984, as amended at 53 FR 30830, Aug. 16, 1988]

§ 25.9 Communications.

Except where otherwise specified, all communications and reports concerning the regulations in this part should be addressed to the Director, Division of Security, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

§ 25.11 Specific exemptions.

The Commission may, upon application of any interested party, grant an exemption from the requirements of this Part 25. Exemptions will be granted only if they are authorized by law and will not constitute an undue risk to the common defense and security. Documentation related to the request, notification and processing of an exemption shall be maintained for three years beyond the period covered by the exemption.

[45 FR 14481, Mar. 5, 1980, as amended at 53 FR 19245, May 27, 1988]

§ 25.13 Maintenance of records.

(a) Each licensee or organization employing individuals approved for personnel security access authorization under this part, shall maintain records as prescribed within the part. These records shall be subject to review and inspection by NRC representatives during security surveys.

(b) Each record required by this part must be legible throughout the retention period specified by each Commission regulation. The record may be the original or a reproduced copy or a microform provided that the copy or microform is authenticated by authorized personnel and that the microform is capable of producing a clear copy throughout the required retention period. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records such as letters, drawings, specifications, must include all pertinent information such as stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.

[45 FR 14481, Mar. 5, 1980, as amended at 53 FR 19245, May 27, 1988]

ACCESS AUTHORIZATIONS

§ 25.15 Access permitted under "Q" or "L" access authorization.

(a) A "Q" access authorization permits an individual access on a need-to-know basis to (1) Secret and Confidential Restricted Data and (2) Secret and Confidential National Security Information including intelligence information, CRYPTO (i.e., cryptographic information) or other classified communications security (COMSEC) information.

(b) An "L" access authorization permits an individual access on a need-to-know basis to Confidential Restricted Data and Secret and Confidential National Security Information other than the categories specifically included in paragraph (a) of this section. In addition, access to certain Confidential COMSEC information is permitted as authorized by a National Communications Security Committee waiver dated February 14, 1985.

(c) Each employee of the Commission is processed for one of the two levels of access authorization. Licensees and other persons will furnish National Security Information and/or Restricted Data to a Commission employee on official business when the employee has the appropriate level of NRC access authorization and need-to-know. Some individuals are permitted to begin NRC employment without an access authorization. However, no NRC employee shall be permitted access to any classified information until the appropriate level of access authorization has been granted to that employee by NRC.

[45 FR 14481, Mar. 5, 1980, as amended at 47 FR 9195, Mar. 4, 1982; 50 FR 36984, Sept. 11, 1985]

§ 25.17 Approval for processing applicants for access authorization.

(a) Access authorizations shall be requested for licensee employees or other persons (e.g., 10 CFR Part 2, Subpart I) who need access to National Security Information and/or Restricted Data in connection with activities under Parts 50, 70, or 72.

(b) The request must include a completed personnel security packet (see § 25.17(c)) and request form (NRC-237) signed by a licensee or licensee contractor official.

(c)(1) Each personnel security packet submitted, must include the following completed forms:

(i) Questionnaire for Sensitive Positions (SF-86, Parts 1 and 2);

(ii) Two Standard fingerprint cards (FD-258);

(iii) Security Acknowledgment (NRC Form 176); and

(iv) Other related forms where specified in accompanying instructions (NRC-254).

(2) Only a Security Acknowledgment (NRC Form 176) need be completed by any person possessing an active access authorization, or who is being processed for an access authorization, by another Federal agency. The active or pending access authorization must be at an equivalent level to that required by the NRC and be based on an adequate investigation not more than five years old.

(d) To avoid delays in processing requests for access authorizations, each security packet should be reviewed for completeness and correctness (including legibility of response on the forms) prior to submittal.

(e) Applications for access authorization processing must be accompanied by a check or money order, payable to the United States Nuclear Regulatory Commission, representing the current cost for the processing of each "Q"

nd "L" access authorization request.
ccess authorization fees will be pub-
shed each time the Office of Person-
el Management notifies NRC of a
hange in the background investiga-
ion rate it charges NRC for conduct-
ng the investigations. Any such
hanged access authorization fees will
e applicable to each access authoriza-
ion request received upon or after the
ate of publication. Applications from
ndividuals having current Federal
ccess authorizations may be proc-
ssed expeditiously at less cost, since
he Commission may accept the certi-
ication of access authorization and in-
estigative data from other Federal
Government agencies which grant per-
onnel access authorizations.

45 FR 14481, Mar. 5, 1980, as amended at
7 FR 9195, Mar. 4, 1982; 48 FR 24320, June
, 1983; 51 FR 35207, Oct. 2, 1986; 53 FR
0830, Aug. 16, 1988]

25.19 Processing applications.

Each application for access authori-
ation together with its accompanying
ee shall be submitted to the NRC Di-
ision of Security. If necessary the
NRC Division of Security may obtain
pproval from the appropriate Com-
nission office exercising licensing or
egulatory authority before processing
he access authorization request.

f the applicant is disapproved for
rocessing, the NRC Division of Secu-
ity will notify the submitter in writ-
ng and will return the original appli-
ation (security packet) and its accom-
anying fee.

25.21 Determination of initial and continued eligibility for access authorization.

(a) Following receipt by the NRC Di-
ision of Security of the reports of the
personnel security investigations, the
record will be reviewed to determine
that granting an access authorization
will not endanger the common defense
and security and is clearly consistent
with the national interest. If such a
determination is made, access authori-
zation will be granted. Questions as to
initial eligibility, and any subsequent
developments that raise a question of
continued eligibility for access author-
ization will be determined in accord-
ance with Part 10 of Chapter I.

(b) The NRC Division of Security shall be promptly notified of developments which bear on continued eligibility for access authorization throughout the period for which the authorization is active (e.g., persons who marry subsequent to the completion of a personnel security packet must report this change by submitting a completed form entitled "Data Report on Spouse").

§ 25.23 Notification of grant of access authorization.

The determination to grant access authorization will be furnished in writing to the licensee or organization that initiated the request. Upon receipt of the notification, the licensee or organization shall obtain, as a condition for grant of access authorization and access to classified information, an executed "Classified Information Nondisclosure Agreement" (SF 312) from the affected individual. The individual shall also be given a security orientation briefing in accordance with § 95.33 of this chapter. The signed SF 312 must be promptly forwarded to the NRC Division of Security. Records of access authorization notification must be maintained by the licensee or requesting organization for three years after the access authorization has been terminated by the NRC Division of Security. This information may also be furnished to other representatives of the Commission, to licensees, contractors, or other Federal agencies. Notifications of access authorization will not be given in writing to the affected individual except:

(a) In those cases in which the determination was made as a result of a Personnel Security Hearing or by Personnel Security Review Examiners, or

(b) When the individual also is the official designated by the licensee to whom written NRC notifications are forwarded.

[51 FR 47205, Dec. 31, 1986, as amended at 53 FR 19245, May 27, 1988; 54 FR 40360, Oct. 4, 1989]

§ 25.25 Cancellation of requests for access authorization.

When a request for an individual's access authorization is withdrawn or cancelled, the requester shall notify the NRC Division of Security immediately, by telephone, so that the full field investigation or national agency check and credit investigation may be discontinued. The caller shall supply the full name and date of birth of the individual, the date of request, and the type of access authorization originally requested ("Q" or "L"). The telephone notification must be promptly confirmed in writing.

[55 FR 11575, Mar. 29, 1990]

§ 25.27 Reopening of cases in which requests for access authorizations are cancelled.

(a) In conjunction with a new request for access authorization for individuals whose cases were previously cancelled, new fingerprint cards in duplicate and a new Security Acknowledgment shall be furnished to the NRC Division of Security along with the request.

(b) Additionally, if 90 days or more have elapsed since the date of the last Questionnaire for Sensitive Positions, a complete personnel security packet (see § 25.17(c)) shall be executed by the individual. The NRC Division of Security, based on investigative or other needs, may require a complete personnel security packet in other cases as well. A fee, equal to the amount paid for an initial request, will be charged only if a new or updating investigation is required.

[45 FR 14481, Mar. 5, 1980, as amended at 53 FR 30830, Aug. 16, 1988]

§ 25.29 Reinstatement of access authorization.

An up-to-date personnel security packet will be furnished with a request for reinstatement of an access authorization if 6 months or more have elapsed since termination of access authorization and a year or more has elapsed since the date of the previous Questionnaire for Sensitive Positions, or if any significant changes are known to have occurred since the termination. A new Security Acknowledgment will be obtained in all cases. Where personnel security packets are not required, a request for reinstatement shall state the level of access authorization to be reinstated and the full name and date of birth of the individual in order to establish positive identification. A fee, equal to the amount paid for an initial request, will be charged only if a new or updating investigation is required.

[45 FR 14481, Mar. 5, 1980, as amended at 53 FR 30830, Aug. 16, 1988]

§ 25.31 Extensions and transfers of access authorizations.

(a) The NRC Division of Security may, on request, extend the authorization of an individual who possesses an access authorization in connection with a particular employer or activity, to permit access to National Security Information and/or Restricted Data in connection with an assignment with another employer or activity.

(b) The NRC Division of Security may, on request, transfer an access authorization when an individual's access authorization under one employer or activity is terminated, simultaneously with the individual being granted access authorization for another employer or activity.

(c) Requests for extension or transfer of access authorization shall state the full name of the person, his date of birth and level of access authorization. The Director, Division of Security, may require a new personnel security packet (see § 25.17(c)) to be completed by the applicant. A fee, equal to the amount paid for an initial request, will be charged only if a new or updating investigation is required.

[45 FR 14481, Mar. 5, 1980, as amended at 48 FR 24320, June 1, 1983]

§ 25.33 Termination of access authorizations.

(a) Access authorizations will be terminated when:

(1) Access authorization is no longer required, or

(2) An individual is separated from the employment or the activity for which he obtained an access authorization for a period of 90 days or more, or

(3) An individual, pursuant to 10 CFR Part 10, is no longer eligible for access authorization.

(b) A representative of the licensee or other organization which employs the individual whose access authorization will be terminated shall immediately notify the NRC Division of Security when the circumstances noted in paragraph (a)(1) or (a)(2) of this section exist; inform the individual that his access authorization is being terminated, and the reason; and that he will be considered for reinstatement of access authorization if he resumes work requiring it.

(c) When an access authorization is to be terminated, a representative of the licensee or other organization shall conduct a security termination briefing of the individual involved, explain the Security Termination Statement (NRC Form 136) and have the individual complete the form. The representative shall promptly forward the original copy of the completed Security Termination Statement to the NRC Division of Security, Office of Administration, Washington, DC 20555.

[45 FR 14481, Mar. 5, 1980, as amended at 48 FR 24320, June 1, 1983; 52 FR 31611, Aug. 21, 1987; 54 FR 53316, Dec. 28, 1989]

CLASSIFIED VISITS

§ 25.35 Classified visits.

Visits to NRC, NRC contractor, licensee or licensee related facilities, or other government agencies or their contractors involving access to classified information by individuals covered by this part require advance certification of "need-to-know" and verification of NRC access authorization. Individuals planning these visits shall complete NRC Form 277, "Request for Visit or Access Approval," with the "need-to-know" certified by the appropriate NRC office exercising licensing or regulatory authority. This NRC office shall then forward the request to the NRC Division of Security at least 15 days in advance of the date of the visit for appropriate verification of NRC access authorization. The Division of Security shall forward the form to the facility to be visited. Records related to these visits must be maintained by the facility for three years following the expiration date of the visit authorization.

[48 FR 24320, June 1, 1983, as amended at 53 FR 19245, May 27, 1988]

VIOLATIONS

§ 25.37 Violations.

(a) An injunction or other court order may be obtained to prohibit a violation of any provision of:

(1) The Atomic Energy Act of 1954, as amended;

(2) Title II of the Energy Reorganization Act of 1974, as amended; or

(3) Any regulation or order issued under these Acts.

(b) National Security Information is protected under the requirements and sanctions of Executive Order 12356.

(c) Whoever willfully violates, attempts to violate, or conspires to violate, any provision of the Atomic Energy Act of 1954, as amended, for which no criminal penalty is specifically provided or any regulation or order prescribed or issued under subsections 161 i or o of the Act may be guilty of a crime and, upon conviction, may be punished by fine or imprisonment or both, as provided by law. Regulations issued under the Act include regulations issued under subsections 161 i and o and cited within the authority citation at the beginning of this part for the purposes of section 223.

[48 FR 24320, June 1, 1983]

APPENDIX TO PART 25—FEES FOR NRC ACCESS AUTHORIZATION

Category	Fee
Initial "L" Access Authorization	[1] $40
Reinstatement of "L" Access Authorization	[1] 40
Extension or Transfer of "L" Access Authorization	[1] 40
Initial "Q" Access Authorization	2,415
Initial "Q" Access Authorization (expedited processing)	2,932
Reinstatement of "Q" Access Authorization	[2] 2,415
Reinstatement of "Q" Access Authorization (expedited processing)	[2] 2,932
Extension or Transfer of "Q"	[2] 2,415
Extension or Transfer of "Q" (expedited processing)	[2] 2,932

[1] If the NRC determines, based on its review of available data, that a full field investigation is necessary, a fee of $2,415 will be assessed prior to the conduct of the investigation.

[2] Full fee will only be charged if investigation is required.

[55 FR 11575, Mar. 29, 1990]

PART 26—FITNESS FOR DUTY PROGRAMS

GENERAL PROVISIONS

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AUDITS

26.80 Audits.

ENFORCEMENT

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APPENDIX A—GUIDELINES FOR NUCLEAR POWER PLANT DRUG AND ALCOHOL TESTING PROGRAMS.

AUTHORITY: Secs. 53, 81, 103, 104, 107, 161, 68 Stat. 930, 935, 936, 937, 939, 948, as amended (42 U.S.C. 2073, 2111, 2112, 2133, 2134, 2137, 2201); secs. 201, 202, 206, 88 Stat. 1242, 1244, 1246, as amended (42 U.S.C. 5841, 5842, 5846).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273) §§ 26.20, 26.21, 26.22, 26.23, 26.24, 26.25, 26.27, 26.28, 26.29 and 26.80 are issued under secs. 161b and i, 68 Stat. 948, and 949 as amended [42 U.S.C. 2201(b) and (i)]; 26.70, 26.71, and 26.73 are issued under sec. 161o, 68 Stat. 950, as amended [42 U.S.C. 2201(o)].

SOURCE: 54 FR 24494, June 7, 1989, unless otherwise noted.

GENERAL PROVISIONS

§ 26.1 Purpose.

This Part prescribes requirements and standards for the establishment and maintenance of certain aspects of fitness-for-duty programs and procedures by the licensed nuclear power industry.

§ 26.2 Scope.

(a) The regulations in this Part apply to licensees authorized to operate a nuclear power reactor. Each licensee shall implement a fitness-for-duty program which complies with this Part. The provisions of the fitness-for-duty program must apply to all persons granted unescorted access to protected areas, and to licensee, vendor, or contractor personnel required to physically report to a licensee's Technical Support Center (TSC) or Emergency Operations Facility (EOF) in accordance with licensee emergency plans and procedures. The regulations in this Part do not apply to NRC employees, or to law enforcement personnel or offsite emergency fire and medical response personnel while responding on-site.

(b) Certain regulations in this Part apply to licensees holding permits to construct a nuclear power plant. Each construction permit holder, with a plant under active construction, shall comply with sections 26.10, 26.20, 26.23, 26.70, and 26.73 of this part; shall implement a chemical testing program, including random tests; and shall make provisions for employee assistance programs, imposition of sanctions, appeal procedures, the protection of information, and recordkeeping.

(c) The requirements in this Part must be implemented by each licensee authorized to construct or operate a nuclear power reactor no later than January 3, 1990.

[54 FR 24494, June 7, 1989; 54 FR 33148, Aug. 11, 1989]

§ 26.3 Definitions.

"Aliquot" means a portion of a specimen used for testing.

"Commission" means the Nuclear Regulatory Commission or its duly authorized representatives.

"Confirmatory test" means a second analytical procedure to identify the presence of a specific drug or drug metabolite which is independent of the initial screening test and which uses a different technique and chemical principle from that of the initial screening test in order to ensure reliability and accuracy. For determining blood alcohol levels, a "confirmatory test" means a second test using another breath alcohol analysis device. Further confirmation upon demand will be by gas chromatography analysis of blood.

"Confirmed positive test" means the result of a confirmatory test that has established the presence of drugs, drug metabolites, or alcohol in a specimen at or above the cut-off level, and that has been deemed positive by the Medical Review Officer (MRO) after evaluation. A "confirmed positive test" for alcohol can also be obtained as a result of a confirmation of blood alcohol levels with a second breath analysis without MRO evaluation.

"Contractor" means any company or individual with which the licensee has contracted for work or service to be performed inside the protected area boundary, either by contract, purchase order, or verbal agreement.

"Cut-off level" means the value set for designating a test result as positive.

"Follow-up testing" means chemical testing at unannounced intervals, to ensure that an employee is maintaining abstinence from the abuse of drugs or alcohol.

"Illegal drugs" means those drugs included in Schedules I through V of the Controlled Substances Act (CSA), but not when used pursuant to a valid prescription or when used as otherwise authorized by law.

"Initial or screening tests" means an immunoassay screen for drugs or drug metabolites to eliminate "negative" urine specimens from further consideration or the first breathalyzer test for alcohol. Initial screening may be performed at the licensee's testing facility; a second screen and confirmation testing for drugs or drug metabolites must be conducted by a HHS-certified laboratory.

"Medical Review Officer" means a licensed physician responsible for receiving laboratory results generated by an employer's drug testing program who has knowledge of substance abuse disorders and has appropriate medical training to interpret and evaluate an individual's positive test result together with his or her medical history and any other relevant biomedical information.

"Protected area" has the same meaning as in §73.2(g) of this chapter, an area encompassed by physical barriers and to which access is controlled.

"Random test" means a system of unannounced drug testing administered in a statistically random manner to a group so that all persons within that group have an equal probability of selection.

"Suitable inquiry" means best-effort verification of employment history for the past five years, but in no case less than three years, obtained through contacts with previous employers to determine if a person was, in the past, tested positive for illegal drugs, subject to a plan for treating substance abuse, removed from, or made ineligible for activities within the scope of 10 CFR Part 26, or denied unescorted access at any other nuclear power plant or other employment in accordance with a fitness-for-duty policy.

"Vendor" means any company or individual, not under contract to a licensee, providing services in protected areas.

§ 26.4 Interpretations.

Except as specifically authorized by the Commission in writing, no interpretation of the meaning of the regulations in this Part by any officer or employee of the Commission other than a written interpretation by the General Counsel will be recognized to be binding upon the Commission.

§ 26.6 Exemptions.

The Commission may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this Part as it determines are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest.

§ 26.8 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this Part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). OMB has approved the information collection requirements contained in this Part under control number 3150-0146.

(b) The approved information collection requirements contained in this Part appear in §§ 26.20, 26.21, 26.22, 26.23, 26.24, 26.27, 26.29, 26.70, 26.71, 26.73, 26.80 and Appendix A.

(c) The total burden for these recordkeeping requirements is estimated to be 313 hours per site per year. In implementing the recordkeeping requirements the affected licensee shall report to the Commission any comments concerning the accuracy of the estimate and any suggestions for reducing the burden.

GENERAL PERFORMANCE OBJECTIVES

§ 26.10 General performance objectives.

Fitness-for-duty programs must:

(a) Provide reasonable assurance that nuclear power plant personnel will perform their tasks in a reliable and trustworthy manner and are not under the influence of any substance, legal or illegal, or mentally or physically impaired from any cause, which in any way adversely affects their ability to safely and competently perform their duties;

(b) Provide reasonable measures for the early detection of persons who are not fit to perform activities within the scope of this Part; and

(c) Have a goal of achieving a drug-free workplace and a workplace free of the effects of such substances.

PROGRAM ELEMENTS AND PROCEDURES

§ 26.20 Written policy and procedures.

Each licensee subject to this Part shall establish and implement written policies and procedures designed to meet the general performance objectives and specific requirements of this Part. Each licensee shall retain a copy of the current written policy and procedures as a record until the Commission terminates each license for which the policy and procedures were developed and, if any portion of the policies and procedures are superseded, retain the superseded material for three years after each change. As a minimum, written policies and procedures must address fitness for duty through the following:

(a) An overall description of licensee policy on fitness for duty. The policy must address use of illegal drugs and abuse of legal drugs (e.g., alcohol, prescription and over-the-counter drugs). Written policy documents must be in sufficient detail to provide affected individuals with information on what is expected of them, and what consequences may result from lack of adherence to the policy. As a minimum, the written policy must prohibit the consumption of alcohol—

(1) Within an abstinence period of at least 5 hours preceding any scheduled working tour, and

(2) During the period of any working tour.

Licensee policy should also address other factors that could affect fitness for duty such as mental stress, fatigue and illness.

(b) A description of programs which are available to personnel desiring assistance in dealing with drug, alcohol, or other problems that could adversely affect the performance of activities within the scope of this Part.

(c) Procedures to be utilized in testing for drugs and alcohol, including procedures for protecting the employee and the integrity of the specimen, and the quality controls used to ensure the test results are valid and attributable to the correct individual.

(d) A description of immediate and follow-on actions which will be taken, and the procedures to be utilized, in those cases where employees, vendors, or contractors assigned to duties within the scope of this Part are determined to have been involved in the use, sale, or possession of illegal drugs; or to have consumed alcohol during the mandatory pre-work abstinence period, while on duty, or to excess prior to reporting to duty as demonstrated with a test that can be used to determine blood alcohol concentration.

(e) A procedure that will ensure that persons called in to perform an unscheduled working tour are fit to perform the task assigned. As a minimum, this procedure must—

(1) Require a statement to be made by a called-in person as to whether he or she has consumed alcohol within the length of time stated in the preduty abstinence policy;

(2) If alcohol has been consumed within this period, require a determination of fitness for duty by breath analysis or other means; and

(3) Require the establishment of controls and conditions under which a person who has been called-in can perform work, if necessary, although alcohol has been consumed. Consumption of alcohol during the abstinence period shall not by itself preclude a licensee from using individuals needed to respond to an emergency.

(f) The Commission may at any time review the licensee's written policy and procedures to assure that they meet the performance objectives of this Part.

§ 26.21 Policy communications and awareness training.

(a) Persons assigned to activities within the scope of this Part shall be provided with appropriate training to ensure they understand—

(1) Licensee policy and procedures, including the methods that will be used to implement the policy;

(2) The personal and public health and safety hazards associated with abuse of drugs and misuse of alcohol;

(3) The effect of prescription and over-the-counter drugs and dietary conditions on job performance and on chemical test results, and the role of the Medical Review Officer;

(4) Employee assistance programs provided by the licensee; and

(5) What is expected of them and what consequences may result from lack of adherence to the policy.

(b) Initial training must be completed prior to assignment to activities within the scope of this Part. Refresher training must be completed on a nominal 12 month frequency or more frequently where the need is indicated. A record of the training must be retained for a period of at least three years.

§ 26.22 Training of supervisors and escorts.

(a) Managers and supervisors of activities within the scope of this Part must be provided appropriate training to ensure they understand—

(1) Their role and responsibilities in implementing the program;

(2) The roles and responsibilities of others, such as the personnel, medical, and employee assistance program staffs;

(3) Techniques for recognizing drugs and indications of the use, sale, or possession of drugs;

(4) Behavioral observation techniques for detecting degradation in performance, impairment, or changes in employee behavior; and

(5) Procedures for initiating appropriate corrective action, to include referral to the employee assistance program.

(b) Persons assigned to escort duties shall be provided appropriate training in techniques for recognizing drugs and indications of the use, sale, or possession of drugs, techniques for recognizing aberrant behavior, and the procedures for reporting problems to supervisory or security personnel.

(c) Initial training must be completed prior to assignment of duties within the scope of this Part and within 3 months after initial supervisory assignment, as applicable. Refresher training must be completed on a nominal 12 month frequency, or more frequently where the need is indicated. A record of the training must be retained for a period of at least three years.

§ 26.23 Contractors and vendors.

(a) All contractor and vendor personnel performing activities within the scope of this Part for a licensee must be subject to either the licensee's program relating to fitness for duty, or to a program, formally reviewed and approved by the licensee, which meets the requirements of this Part. Written agreements between licensees and contractors or vendors for activities within the scope of this Part must be retained for the life of the contract and will clearly show that—

(1) The contractor or vendor is responsible to the licensee for adhering to the licensee's fitness-for-duty policy, or maintaining and adhering to an effective fitness-for-duty program; which meets the standards of this Part; and

(2) Personnel having been denied access or removed from activities within the scope of this Part at any nuclear power plant for violations of a fitness-for-duty policy will not be assigned to work within the scope of this Part without the knowledge and consent of the licensee.

(b) Each licensee subject to this Part shall assure that contractors whose own fitness-for-duty programs are relied on by the licensee adhere to an effective program, which meets the requirements of this Part, and shall conduct audits pursuant to § 26.80 for this purpose.

§ 26.24 Chemical testing.

(a) To provide a means to deter and detect substance abuse, the licensee shall implement the following chemical testing programs for persons subject to this Part:

(1) Testing within 60 days prior to the initial granting of unescorted access to protected areas or assignment to activities within the scope of this Part.

(2) Unannounced tests imposed in a random manner. The tests must be administered so that a person completing a test is immediately eligible for another unannounced test. As a minimum, tests must be administered on a nominal weekly frequency and at various times during the day. Random testing shall be conducted at a rate equal to at least 100 percent of the workforce.

(3) Testing for-cause, i.e., as soon as possible following any observed behavior indicating possible substance abuse; after accidents involving a failure in individual performance resulting in personal injury, in a radiation exposure or release of radioactivity in excess of regulatory limits, or actual or potential substantial degradations of the level of safety of the plant if there is reasonable suspicion that the worker's behavior contributed to the event; or after receiving credible information that an individual is abusing drugs or alcohol.

(4) Follow-up testing on an unannounced basis to verify continued abstention from the use of substances covered under this Part.

(b) Testing for drugs and alcohol must at a minimum, conform to the "Guidelines for Nuclear Power Plant Drug and Alcohol Testing Programs," issued by the Nuclear Regulatory Commission and appearing in Appendix A to this rule, hereinafter referred to as the NRC Guidelines. Licensees, at their discretion, may implement programs with more stringent standards (e.g., lower cutoff levels, broader panel of drugs). All requirements in this Part apply to persons who fail a more stringent standard, but do not test positive under the NRC Guidelines; management actions must be the same as if the individual failed the NRC standards.

(c) Licensees shall test for all substances described in paragraph 2.1(a) of the NRC Guidelines. In addition, licensees may consult with local law enforcement authorities, hospitals, and drug counseling services to determine whether other substances with abuse potential are being used in the geographical locale of the facility and the local workforce. When appropriate, other substances so identified may be added to the panel of substances for testing. Appropriate cutoff limits must be established by the licensee for these substances.

(d) Licensees may conduct initial screening tests of an aliquot prior to forwarding selected specimens to a laboratory certified by the Department of Health and Human Services, provided the licensee's staff possesses the necessary training and skills for the tasks assigned, their qualifications are documented, and adequate quality controls are implemented. Quality control procedures for initial screening tests by a licensee's testing facility must include the processing of blind performance test specimens and the submission to the HHS-certified laboratory of a sampling of specimens initially tested as negative. Access to the results of preliminary tests must be limited to the licensee's testing staff, the Medical Review Officer, the Fitness-For-Duty Program Manager, and employee assistance program staff when appropriate.

(e) The Medical Review Officer's review of the test results must be completed and licensee management notified within 10 days of the initial presumptive positive screening test.

(f) All testing of specimens for urine drug testing, except onsite testing under paragraph (d) above, must be performed in a laboratory certified by the U.S. Department of Health and Human Services for that purpose consistent with its standards and procedures for certification. Except for suspect specimens submitted for special processing (Section 2.7(d) of Appendix A), all specimens sent to certified laboratories shall be subject to initial screening by the laboratory and all specimens screened as presumptively positive shall be subject to confirmation testing by the laboratory. Licensees shall submit blind performance test specimens to certified laboratories in accordance with the NRC Guidelines (Appendix A).

(g) Tests for alcohol must be administered by breath analysis using breath alcohol analyses devices meeting evidential standards described in Section 2.7(O)(3) of Appendix A. A breath alcohol content indicating a blood alcohol concentration of 0.04 percent or greater must be a positive test result. The confirmatory test for alcohol shall be done with another breath measurement instrument. Should the person demand further confirmation, the test must be a gas chromatography analysis of blood.

§ 26.25 Employee assistance programs (EAP).

Each licensee subject to this Part shall maintain an employee assistance program to strengthen fitness-for-duty programs by offering assessment, short-term counseling, referral services, and treatment monitoring to employees with problems that could adversely affect the performance of activities within the scope of this Part. Employee assistance programs should be designed to achieve early intervention and provide for confidential assistance. The employee assistance program staff shall inform licensee management when a determination has been made that any individual's condition constitutes a hazard to himself or herself or others (including those who have self-referred).

§ 26.27 Management actions and sanctions to be imposed.

(a) Prior to the initial granting of unescorted access to a protected area or the assignment to activities within the scope of this Part to any person, the licensee shall obtain a written statement from the individual as to whether activities within the scope of this Part were ever denied the individual. The licensee shall complete a suitable inquiry on a best-efforts basis to determine if that person was, in the past, tested positive for drugs or use of alcohol that resulted in on-duty impairment, subject to a plan for treating substance abuse (except for self-referral for treatment), or removed from activities within the scope of this Part, or denied unescorted access at any other nuclear power plant in accordance with a fitness-for-duty policy. If such a record is established, the new assignment to activities within the scope of this Part or granting of unescorted access must be based upon a management and medical determination of fitness for duty and the establishment of an appropriate follow-up testing program, provided the restrictions of paragraph (b) of this section are observed. To meet this requirement, the identity of persons denied unescorted access or removed under the provisions of this Part and the circumstances for such denial or removal, including test results, will be made available in response to a licensee's, contractor's, or vendor's inquiry supported by a signed release from the individual. Failure to list reasons for removal or revocation of unescorted access shall be sufficient cause for denial of unescorted access. Temporary access provisions shall not be affected by this Part provided that the prospective worker passes a chemical test conducted according to the requirements of 26.24(a)(1).

(b) Each licensee subject to this Part shall, as a minimum, take the following actions. Nothing herein shall prohibit the licensee from taking more stringent action.

(1) Impaired workers, or those whose fitness may be questionable, shall be removed from activities within the scope of this Part, and may be returned only after determined to be fit to safely and competently perform activities within the scope of this Part.

(2) Lacking any other evidence to indicate the use, sale, or possession of illegal drugs onsite, a confirmed positive test result must be presumed to be an indication of offsite drug use. The first confirmed positive test must, as a minimum, result in immediate removal from activities within the scope of this Part for at least 14 days and referral to the EAP for assessment and counseling during any suspension period. Plans for treatment, follow-up, and future employment must be developed, and any rehabilitation program deemed appropriate must be initiated during such suspension period. Satisfactory management and medical assurance of the individual's fitness to adequately perform activities within the scope of this Part must be obtained before permitting the individual to be returned to these activities. Any subsequent confirmed positive test must result in removal from unescorted access to protected areas and activities within the scope of this Part for a minimum of three years from the date of removal.

(3) Any individual determined to have been involved in the sale, use, or possession of illegal drugs while within a protected area of any nuclear power plant must be removed from activities within the scope of this Part. The individual may not be granted unescorted access to protected areas or assigned to activities within the scope of this Part for a minimum of five years from the date of removal.

(4) Persons removed for periods of three years or more under the provisions of paragraphs (b) (2) and (3) of this section for the illegal sale, use or possession of drugs and who would have been removed under the current standards of a hiring licensee, may be granted unescorted access and assigned duties within the scope of this Part by a licensee subject to this Part only when the hiring licensee receives satisfactory medical assurance that the person has abstained from drugs for at least three years. Satisfactory management and medical assurance of the individual's fitness to adequately perform activities within the scope of this Part must be obtained before permitting the individual to perform activities within the scope of this Part. Any person granted unescorted access or whose access is reinstated under these provisions must be given unannounced follow-up tests at least once every month for four months and at least once every three months for the next two years and eight months after unescorted access is reinstated to verify continued abstinence from proscribed substances. Any confirmed use of drugs through this process or any other determination of subsequent involvement in the sale, use or possession of illegal substances must result in permanent denial of unescorted access.

(5) Paragraphs (b) (2), (3), and (4) of this section do not apply to alcohol, valid prescriptions, or over-the-counter drugs. Licensee sanctions for confirmed misuse of alcohol, valid prescription, and over-the-counter drugs shall be sufficient to deter abuse of legally obtainable substances as a substitute for abuse of proscribed drugs.

(c) Refusal to provide a specimen for testing and resignation prior to removal for violation of company fitness-for-duty policy concerning drugs must be recorded as removals for cause. These records must be retained for the purpose of meeting the requirements of § 26.27(a).

(d) If a licensee has a reasonable belief that an NRC employee may be under the influence of any substance, or otherwise unfit for duty, the licensee may not deny access but shall escort the individual. In any instance of this occurrence, the appropriate Regional Administrator must be notified immediately by telephone. During other than normal working hours, the NRC Operations Center must be notified.

§ 26.28 Appeals.

Each licensee subject to this Part, and each contractor or vendor implementing a fitness-for-duty program under the provisions of § 26.23, shall establish a procedure for licensee and contractor or vendor employees to appeal a positive alcohol or drug determination. The procedure must provide notice and an opportunity to respond and may be an impartial internal management review. A licensee review procedure need not be provided to employees of contractors or vendors when the contractor or vendor is administering his own alcohol and drug testing.

§ 26.29 Protection of information.

(a) Each licensee subject to this Part, who collects personal information on an individual for the purpose of complying with this Part, shall establish and maintain a system of files and procedures for the protection of the personal information. This system must be maintained until the Commission terminates each license for which the system was developed.

(b) Licensees, contractors, and vendors shall not disclose the personal information collected and maintained to persons other than assigned Medical Review Officers, other licensees or their authorized representatives legitimately seeking the information as required by this Part for unescorted access decisions and who have obtained a release from current or prospective employees or contractor personnel, NRC representatives, appropriate law enforcement officials under court order, the subject individual or his or her representative, or to those licensee representatives who have a need to have access to the information in performing assigned duties, including audits of licensee's, contractor's, and vendor's programs, to persons deciding matters on review or appeal, and to other persons pursuant to court order. This section does not authorize the licensee, contractor, or vendor to withhold evidence of criminal conduct from law enforcement officials.

INSPECTIONS, RECORDS, AND REPORTS

§ 26.70 Inspections.

(a) Each licensee subject to this Part shall permit duly authorized representatives of the Commission to inspect, copy, or take away copies of its records and inspect its premises, activities, and personnel as may be necessary to accomplish the purposes of this Part.

(b) Written agreements between licensees and their contractors and vendors must clearly show that the—

(1) Licensee is responsible to the Commission for maintaining an effective fitness-for-duty program in accordance with this Part; and

(2) Duly authorized representatives of the Commission may inspect, copy, or take away copies of any licensee, contractor, or vendor's documents, records, and reports related to implementation of the licensee's, contractor's, or vendor's fitness-for-duty program under the scope of the contracted activities.

§ 26.71 Recordkeeping requirements.

Each licensee subject to this Part and each contractor and vendor implementing a licensee approved program under the provisions of § 26.23 shall—

(a) Retain records of inquiries conducted in accordance with § 26.27(a), that result in the granting of unescorted access to protected areas, until five years following termination of such access authorizations;

(b) Retain records of confirmed positive test results which are concurred in by the Medical Review Officer, and the related personnel actions for a period of at least five years;

(c) Retain records of persons made ineligible for three years or longer for assignment to activities within the scope of this Part under the provisions of § 26.27(b) (2), (3), (4) or (c), until the Commission terminates each license under which the records were created; and

(d) Collect and compile fitness-for-duty program performance data on a standard form and submit this data to the Commission within 60 days of the end of each 6 month reporting period (January-June and July-December). The data for each site (corporate and other support staff locations may be separately consolidated) shall include: random testing rate; drugs tested for and cut-off levels, including results of tests using lower cut-off levels and tests for other drugs; workforce populations tested; numbers of tests and results by population and type of test (i.e., pre-badging, random, for-cause, etc.); substances identified; summary of management actions; and a list of events reported. The data must be analyzed and appropriate actions taken to correct program weaknesses. The data and analysis must be retained for three years.

§ 26.73 Reporting requirements.

(a) Each licensee subject to this Part shall inform the Commission of significant fitness-for-duty events including:

(1) Sale, use, or possession of illegal drugs within the protected area and,

(2) Any acts by any person licensed under 10 CFR Part 55 to operate a power reactor or by any supervisory personnel assigned to perform duties within the scope of this Part—

(i) Involving the sale, use, or possession of a controlled substance,

(ii) Resulting in confirmed positive tests on such persons,

(iii) Involving use of alcohol within the protected area, or

(iv) Resulting in a determination of unfitness for scheduled work due to the consumption of alcohol.

(b) Notifications must be made to the NRC Operations Center by telephone within 24 hours of the discovery of the event by the licensee.

(c) Fitness-for-duty events shall be reported under this section rather than reported under the provisions of § 73.71.

(d) By January 3, 1990, each licensee shall certify to the NRC that it has implemented a fitness-for-duty program that meets the requirements of 10 CFR Part 26. The certification shall describe any licensee cut-off levels more stringent than those imposed by this Part.

[54 FR 24494, June 7, 1989; 54 FR 47451, Nov. 14, 1989]

AUDITS

§ 26.80 Audits.

(a) Each licensee subject to this Part shall audit the fitness-for-duty program nominally every 12 months. In addition, audits must be conducted, nominally every 12 months, of those portions of fitness-for-duty programs implemented by contractors and vendors. Licensees may accept audits of contractors and vendors conducted by other licensees and need not re-audit the same contractor or vendor for the same period of time. Each sharing utility shall maintain a copy of the audit report, to include findings, recommendations and corrective actions. Licensees retain responsibility for the effectiveness of contractor and vendor programs and the implementation of appropriate corrective action.

(b) Audits must focus on the effectiveness of the program and be conducted by individuals qualified in the subject(s) being audited, and independent of both fitness-for-duty program management and personnel directly responsible for implementation of the fitness-for-duty program.

(c) The result of the audit, along with recommendations, if any, must be documented and reported to senior corporate and site management. The resolution of the audit findings and corrective actions must be documented. These documents must be retained for three years. NRC Guidelines require licensee audits of HHS-certified laboratories as described in Appendix A.

ENFORCEMENT

§ 26.90 Violations.

(a) An injunction or other court order may be obtained to prohibit a violation of any provision of—

(1) The Atomic Energy Act of 1954, as amended;

(2) Title II of the Energy Reorganization Act of 1974; or

(3) Any regulation or order issued under these Acts.

(b) A court order may be obtained for the payment of a civil penalty imposed under section 234 of the Atomic Energy Act of 1954, for violations of—

(1) Section 53, 57, 62, 63, 81, 82, 101, 103, 104, 107, or 109 of the Act;

(2) Section 206 of the Energy Reorganization Act of 1974;

(3) Any rule, regulation, or order issued under these Sections;

(4) Any term, condition, or limitation of any license issued under these Sections; or

(5) Any provisions for which a license may be revoked under section 186 of the Atomic Energy Act of 1954.

(c) Any person who willfully violates any provision of the Atomic Energy Act of 1954, as amended, or any regulation or order issued under the requirements of the Act, include regulations under this Part, may be guilty of a crime and, upon conviction, may be punished by fine or imprisonment or both, as provided by law.

APPENDIX A—GUIDELINES FOR NUCLEAR POWER PLANT DRUG AND ALCOHOL TESTING PROGRAMS

Subpart A—General

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Subpart C—Employee Protection

3.1 Protection of Employee Records
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Subpart D—Certification of Laboratories Engaged in Chemical Testing

4.1 Use of DHHS-Certified Laboratories

Subpart A—General

1.1 Applicability.

(1) These guidelines apply to licensees authorized to operate nuclear power reactors.

(2) Licensees may set more stringent cutoff levels than specified herein or test for substances other than specified herein and shall inform the Commission of such deviation within 60 days of implementing such change. Licensees may not deviate from the provisions of these guidelines without the written approval of the Commission.

(3) Only laboratories which are HHS-certified are authorized to perform urine drug testing for NRC licensees, vendors, and licensee contractors.

1.2 Definitions.

For the purposes of this part, the following definitions apply:

"Aliquot." A portion of a specimen used for testing.

"BAC." Blood alcohol concentration (BAC), which can be measured directly from blood or derived from a measure of the concentration of alcohol in a breath specimen, is a measure of the mass of alcohol in a volume of blood such that an individual with 100 mg of alcohol per 100 ml of blood has a BAC of 0.10 percent.

"Commission." The U.S. Nuclear Regulatory Commission or its duly authorized representatives.

"Chain-of-custody." Procedures to account for the integrity of each specimen by tracking its handling and storage from the point of specimen collection to final disposition of the specimen.

"Collection site." A place designated by the licensee where individuals present themselves for the purpose of providing a specimen of their urine, breath, and/or blood to be analyzed for the presence of drugs or alcohol.

"Collection site person." A person who instructs and assists individuals at a collection site and who receives and makes an initial examination of the specimen(s) provided by those individuals. A collection site person shall have successfully completed training to carry out this function or shall be a licensed medical professional or technician who is provided instructions for collection under this part and certifies completion as required herein. In any case where: (a) a collection is observed or (b) collection is monitored by nonmedical personnel, the collection site person must be a person of the same gender as the donor.

"Confirmatory test." A second analytical procedure to identify the presence of a specific drug or drug metabolite which is independent of the initial screening test and which uses a different technique and chemical principle from that of the initial test in order to ensure reliability and accuracy. (At this time gas chromatography/mass spectrometry [GC/MS] is the only authorized confirmation method for cocaine, marijuana, opiates, amphetamines, phencyclidine). For determining blood alcohol levels, a "confirmatory test" means a second test using another breath alcohol analysis device. Further confirmation upon demand will be by gas chromatography analysis of blood.

"Confirmed positive test." The result of a confirmatory test that has established the presence of drugs, drug metabolites, or alcohol in a specimen at or above the cut-off level, and that has been deemed positive by the Medical Review Officer (MRO) after evaluation. A "confirmed positive test" for alcohol can also be obtained as a result of a confirmation of blood alcohol levels with a second breath analysis without MRO evaluation.

"HHS-certified laboratory." A urine and blood testing laboratory that maintains certification to perform drug testing under the Department of Health and Human Services (HHS) "Mandatory Guidelines for Federal Workplace Drug Testing Programs" (53 FR 11970).

"Illegal drugs." Those drugs included in Schedules I through V of the Controlled Substances Act (CSA), but not when used pursuant to a valid prescription or when used as otherwise authorized by law.

"Initial or screening test." An immunoassay screen for drugs or drug metabolites to eliminate "negative" urine specimens from further consideration or the first breathalyzer test for alcohol.

"Licensee's testing facility." A drug testing facility operated by the licensee or one of its vendors or contractors to perform the initial testing of urine samples and to perform initial breath tests for alcohol. Such a testing facility is optional and not required to maintain HHS certification under this part.

"Medical Review Officer." A licensed physician responsible for receiving laboratory results generated by an employer's drug testing program who has knowledge of substance abuse disorders and has appropriate medical training to interpret and evaluate an individual's positive test result together with his or her medical history and any other relevant biomedical information.

"Permanent record book." A permanently bound book in which identifying data on each specimen collected at a collection site are permanently recorded in the sequence of collection.

"Reason to believe." Reason to believe that a particular individual may alter or substitute the urine specimen.

"Split sample." A portion of a urine specimen that may be stored by the licensee to be tested in the event of appeal.

Subpart B—Scientific and Technical Requirements

2.1 The Substances.

(a) Licensees shall, as a minimum, test for marijuana, cocaine, opiates, amphetamines, phencyclidine, and alcohol for pre-access, for-cause, random, and follow-up tests.

(b) Licensees may test for any illegal drugs during a for-cause test, or analysis of any specimen suspected of being adulterated or diluted through hydration or other means.

(c) Licensees shall establish rigorous testing procedures that are consistent with the intent of these guidelines for any other drugs not specified in these guidelines for which testing is authorized under 10 CFR 26, so that the appropriateness of the use of these substances can be evaluated by the Medical Review Officer to ensure that individuals granted unescorted access are fit for maintaining access to and for performing duties in protected areas.

(d) Specimens collected under NRC regulations requiring compliance with this part may only be designated or approved for testing as described in this part and shall not be used to conduct any other analysis or test without the permission of the tested individual.

(e) This section does not prohibit procedures reasonably incident to analysis of a specimen for controlled substances (e.g., determination of pH on tests for specific gravity, creatinine concentration, or presence of adulterants).

2.2 General Administration of Testing.

The licensee testing facilities and HHS-certified laboratories described in this part shall develop and maintain clear and well-documented procedures for collection, shipment, and accession of urine and blood specimens under this part. Such procedures shall include, as a minimum, the following:

(a) Use of a chain-of-custody form. The original shall accompany the specimen to the HHS-certified laboratory. A copy shall accompany any split sample. The form shall be a permanent record on which is retained identity data (or codes) on the employee and information on the specimen collection process and transfers of custody of the specimen.

(b) Use of a tamperevident sealing system designed in a manner such that the specimen container top can be sealed against undetected opening, the container can be identified with a unique identifying number identical to that appearing on the chain-of-custody form, and space has been provided to initial the container affirming its identity. For purposes of clarity, this requirement assumes use of a system made up of one or more pre-printed labels and seals (or a unitary label/seal), but use of other, equally effective technologies is authorized.

(c) Use of a shipping container in which one or more specimens and associated paperwork may be transferred and which can be sealed and initialled to prevent undetected tampering.

(d) Written procedures, instructions, and training shall be provided as follows:

(1) Licensee collection site procedures and training of collection site personnel shall clearly emphasize that the collection site person is responsible for maintaining the integrity of the specimen collection and transfer process, carefully ensuring the modesty and privacy of the individual tested, and is to avoid any conduct or remarks that might be construed as accusatorial or otherwise offensive or inappropriate.

(2) A non-medical collection site person shall receive training in compliance with this appendix and shall demonstrate proficiency in the application of this appendix prior to serving as a collection site person. A medical professional, technologist, or technician licensed or otherwise approved to practice in the jurisdiction in which collection occurs may serve as a collection site person if that person is provided the instructions described in 2.2(3) and performs collections in accordance with those instructions.

(3) Collection site persons shall be provided with detailed, clearly-illustrated, written instructions on the collection of specimens in compliance with this part. Individuals subject to testing shall also be provided standard written instructions setting forth their responsibilities.

(4) The option to provide a blood specimen for confirmatory analysis following a positive breath test shall be specified in the written instructions provided to individuals tested. The instructions shall also state that failure to request a confirmatory blood test indicates that the individual accepts the breath test results.

2.3 Preventing Subversion of Testing.

Licensees shall carefully select and monitor persons responsible for administering the testing program (e.g., collection site persons, laboratory technicians, specimen couriers, and those selecting and notifying personnel to be tested), based upon the highest standards for honesty and integrity, and shall implement measures to ensure that these standards are maintained. As a minimum, these measures shall ensure that the integrity of such persons is not compromised or subject to efforts to compromise due to personal relationships with any individuals subject to testing. As a minimum:

(1) Supervisors, co-workers, and relatives of the individual being tested shall not perform any collection, assessment, or evaluation procedures.

(2) Appropriate background checks and psychological evaluations shall be completed prior to assignment of any tasks associated with the administration of the program, and shall be conducted at least once every three years.

(3) Persons responsible for administering the testing program shall be subjected to a behavioral observation program designed to assure that they continue to meet the highest standards for honesty and integrity.

2.4 Specimen Collection Procedures.

(a) "Designation of Collection Site." Each drug testing program shall have one or more designated collection sites which have all necessary personnel, materials, equipment, facilities, and supervision to provide for the collection, security, temporary storage, and shipping or transportation of urine or blood specimens to a drug testing laboratory. A properly equipped mobile facility that meets the requirements of this part is an acceptable collection site.

(b) "Collection Site Person." A collection site person shall have successfully completed training to carry out this function. In any case where the collection of urine is observed, the collection site person must be a person of the same gender as the donor. Persons drawing blood shall be qualified to perform that task.

(c) "Security." The purpose of this paragraph is to prevent unauthorized access which could compromise the integrity of the collection process or the specimen. Security procedures shall provide for the designated collection site to be secure. If a collection site facility cannot be dedicated solely to drug and alcohol testing, the portion of the facility used for testing shall be secured during that testing.

(1) A facility normally used for other purposes, such as a public rest room or hospital examining room, may be secured by visual inspection to ensure other persons are not present, and that undetected access (e.g., through a rear door not in the view of the collection site person) is impossible. Security during collection may be maintained by effective restriction of access to collection materials and specimens. In the case of a public rest room, the facility must be posted against access during the entire collection procedure to avoid embarrassment to the individual or distraction of the collection site person.

(2) If it is impractical to maintain continuous physical security of a collection site from the time the specimen is presented until the sealed container is transferred for

shipment, the following minimum procedures shall apply: The specimen shall remain under the direct control of the collection site person from delivery to its being sealed in a mailer or secured for shipment. The mailer shall be immediately mailed, maintained in secure storage, or remain until mailed under the personal control of the collection site person. These minimum procedures shall apply to the mailing of specimens to licensee testing facilities from collection sites (except where co-located) as well as to the mailing of specimens to HHS-certified laboratories. As an option, licensees may ship several specimens via courier in a locked or sealed shipping container.

(d) "Chain-of-Custody." Licensee chain-of-custody forms shall be properly executed by authorized collection site personnel upon receipt of specimens. Handling and transportation of urine and blood specimens from one authorized individual or place to another shall always be accomplished through chain-of-custody procedures. Every effort shall be made to minimize the number of persons handling the specimens.

(e) "Access to Authorized Personnel Only." No unauthorized personnel shall be permitted in any part of the designated collection site where specimens are collected or stored. Only the collection site person may handle specimens prior to their securement in the mailing or shipping container or monitor or observe specimen collection (under the conditions specified in this part). In order to promote security of specimens, avoid distraction of the collection site person, and ensure against any confusion in the identification of specimens, a collection site person shall conduct only one collection procedure at any given time. For this purpose, a collection procedure is complete when the specimen container has been sealed and initialed, the chain-of-custody form has been executed, and the individual has departed the collection site.

(f) "Privacy." Procedures for collecting urine specimens shall allow individual privacy unless there is reason to believe that a particular individual may alter or substitute the specimen to be provided. For purposes of this appendix the following circumstances are the exclusive grounds constituting a reason to believe that the individual may alter or substitute a urine specimen:

(1) The individual has presented a urine specimen that falls outside the normal temperature range, and the individual declines to provide a measurement of oral body temperature by sterile thermometer, as provided in paragraph (g)(14) of this appendix, or the oral temperature does not equal or exceed that of the specimen.

(2) The last urine specimen provided by the individual (i.e., on a previous occasion) was determined by the laboratory to have a specific gravity of less than 1.003 or a creatinine concentration below .2 g/L.

(3) The collection site person observes conduct clearly and unequivocally indicating an attempt to substitute or adulterate the sample (e.g., substitute urine in plain view, blue dye in specimen presented, etc.).

(4) The individual has previously been determined to have used a substance inappropriately or without medical authorization and the particular test is being conducted as a part of a rehabilitation program or on return to service after evaluation and/or treatment for a confirmed positive test result.

(g) "Integrity and Identity of Specimens." Licensees shall take precautions to ensure that a urine specimen is not adulterated or diluted during the collection procedure, that a blood sample or breath exhalent tube cannot be substituted or tampered with, and that the information on the specimen container and in the record book can identify the individual from whom the specimen was collected. The following minimum precautions shall be taken to ensure that authentic specimens are obtained and correctly identified:

(1) To deter the dilution of urine specimens at the collection site, toilet bluing agents shall be placed in toilet tanks wherever possible, so the reservoir of water in the toilet bowl always remains blue. There shall be no other source of water (e.g., no shower or sink) in the enclosure where urination occurs. If there is another source of water in the enclosure, it shall be effectively secured or monitored to ensure it is not used (undetected) as a source for diluting the specimen.

(2) When an individual arrives at the collection site for a urine or breath test, the collection site person shall ensure that the individual is positively identified as the person selected for testing (e.g., through presentation of photo identification or identification by the employer's representative). If the individual's identity cannot be established, the collection site person shall not proceed with the collection.

(3) If the individual fails to arrive for a urine or breath test at the assigned time, the collection site person shall contact the appropriate authority to obtain guidance on the action to be taken.

(4) After the individual has been positively identified, the collection site person shall ask the individual to sign a consent-to-testing form and to list all of the prescription medications and over-the-counter preparations that he or she can remember using within the past 30 days.

(5) The collection site person shall ask the individual to remove any unnecessary outer garments such as a coat or jacket that might conceal items or substances that

could be used to tamper with or adulterate the individual's urine, breath, or blood specimen. The collection site person shall ensure that all personal belongings such as a purse or briefcase remain with the outer garments outside of the room in which the blood, breath, or urine sample is collected. The individual may retain his or her wallet.

(6) The individual shall be instructed to wash and dry his or her hands prior to urination.

(7) After washing hands prior to urination, the individual shall remain in the presence of the collection site person and shall not have access to any water fountain, faucet, soap dispenser, cleaning agent or any other materials which could be used to adulterate the urine specimen.

(8) The individual may provide his/her urine specimen in the privacy of a stall or otherwise partitioned areas that allows for individual privacv.

(9) The collection site person shall note any unusual behavior or appearance in the permanent record book and on the chain-of-custody form.

(10) In the exceptional event that a designated collection site is inaccessible and there is an immediate requirement for urine specimen collection (e.g., an accident investigation), a public or on-site rest room may be used according to the following procedures. A collection site person of the same gender as the individual shall accompany the individual into the rest room which shall be made secure during the collection procedure. If possible, a toilet bluing agent shall be placed in the bowl and any accessible toilet tank. The collection site person shall remain in the rest room, but outside the stall, until the specimen is collected. If no bluing agent is available to deter specimen dilution, the collection site person shall instruct the individual not to flush the toilet until the specimen is delivered to the collection site person. After the collection site person has possession of the specimen, the individual will be instructed to flush the toilet and to participate with the collection site person in completing the chain-of-custody procedures.

(11) Upon receiving a urine specimen from the individual, the collection site person shall determine that it contains at least 60 milliliters of urine. If there is less than 60 milliliters of urine in the container, additional urine shall be collected in a separate container to reach a total of 60 milliliters. (The temperature of the partial specimen in each separate container shall be measured in accordance with paragraph (f)(13) of this section, and the partial specimens shall be combined in one container.) The individual may be given a reasonable amount of liquid to drink for this purpose (e.g., a glass of water). If the individual fails for any reason to provide 60 milliliters of urine, the collection site person shall contact the appropriate authority to obtain guidance on the action to be taken.

(12) After the urine specimen has been provided and submitted to the collection site person, the individual shall be allowed to wash his or her hands.

(13) Immediately after the urine specimen is collected, the collection site person shall measure the temperature of the specimen. The temperature measuring device used must accurately reflect the temperature of the specimen and not contaminate the specimen. The time from urination to temperature measurement is critical and in no case shall exceed 4 minutes.

(14) If the temperature of a urine specimen is outside the range of 32.5°- 37.7 °C/ 90.5°-99.8 °F, that is a reason to believe that the individual may have altered or substituted the specimen, and another specimen shall be collected under direct observation of a same gender collection site person and both specimens shall be forwarded to the laboratory for testing. An individual may volunteer to have his or her oral temperature taken to provide evidence to counter the reason to believe the individual may have altered or substituted the specimen caused by the specimen's temperature falling outside the prescribed range.

(15) Immediately after a urine specimen is collected, the collection site person shall also inspect the specimen to determine its color and look for any signs of contaminants. Any unusual findings shall be noted in the permanent record book.

(16) All urine specimens suspected of being adulterated or found to be diluted shall be forwarded to the laboratory for testing.

(17) Whenever there is reason to believe that a particular individual may alter or substitute the urine specimen to be provided, a second specimen shall be obtained as soon as possible under the direct observation of a same gender collection site person. Where appropriate, measures will be taken to prevent additional hydration.

(18) Alcohol breath tests shall be delayed at least 15 minutes if any source of mouth alcohol (e.g., breath fresheners) or any other substances are ingested (e.g., eating, smoking, regurgitation of stomach contents from vomiting or burping). The collection site person shall ensure that each breath specimen taken comes from the end, rather than the beginning, of the breath expiration. For each screening test, two breath specimens shall be collected from each individual no less than two minutes apart and no more than 10 minutes apart. The test results shall be considered accurate if the result of each measurement is within plus or minus 10 percent of the average of the two measurements. If the two tests do not

agree, the breath tests shall be repeated on another evidential-grade breath analysis device. Confirmatory testing is accomplished by repeating the above procedure on another evidential-grade breath analysis device.

(19) If the alcohol breath tests indicates that the individual is positive for a BAC at or above the 0.04 percent cut-off level, the individual may request a confirmatory blood test, at his or her discretion. All vacuum tube and needle assemblies used for blood collection shall be factory-sterilized. The collection site person shall ensure that they remain properly sealed until used. Antiseptic swabbing of the skin shall be performed with a nonethanol antiseptic. Sterile procedures shall be followed when drawing blood and transferring the blood to a storage container; in addition, the container must be sterile and sealed.

(20) Both the individual being tested and the collection site person shall keep urine and blood specimens in view at all times prior to their being sealed and labeled. If a urine specimen is split (as described in Section 2.7(j)) and if any specimen is transferred to a second container, the collection site person shall request the individual to observe the splitting of the urine sample or the transfer of the specimen and the placement of the tamperevident seal over the container caps and down the sides of the containers.

(21) The collection site person and the individual shall be present at the same time during procedures outlined in paragraphs (h) through (j) of this section.

(22) The collection site person shall place securely on each container an identification label which contains the date, the individual's specimen number, and any other identification information provided or required by the drug testing program. If separate from the labels, the tamperevident seals shall also be applied.

(23) The individual shall initial the identification labels on the specimen containers for the purpose of certifying that it is the specimen collected from him or her.

(i) The individual shall be asked to read and sign a statement on either the chain-of-custody form or in the permanent record book certifying that the specimens identified as having been collected from him or her are in fact the specimen he or she provided.

(ii) The individual shall be provided an opportunity to set forth on the urine chain-of-custody form information concerning medications taken or administered in the past 30 days.

(24) The collection site person shall enter in the permanent record book all information identifying the specimens. The collection site person shall sign the permanent record book next to the identifying information.

(25) A higher level supervisor in the drug testing program shall review and concur in advance with any decision by a collection site person to obtain a urine specimen under the direct observation of a same gender collection site person based on a reason to believe that the individual may alter or substitute the specimen to be provided.

(26) The collection site person shall complete the chain-of-custody forms for both the aliquot and the split sample, if collected, and shall certify proper completion of the collection.

(27) The specimens and chain-of-custody forms are now ready for transfer to the laboratory or the licensee's testing facility. If the specimens are not immediately prepared for shipment, they shall be appropriately safeguarded during temporary storage.

(28) While any part of the above chain-of-custody procedures is being performed, it is essential that the specimens and custody documents be under the control of the involved collection site person. The collection site person shall not leave the collection site in the interval between presentation of the specimen by the individual and securement of the samples with identifying labels bearing the individual's specimen identification numbers and seals initialled by the individual. If the involved collection site person leaves his or her work station momentarily, the specimens and chain-of-custody forms shall be taken with him or her or shall be secured. If the collection site person is leaving for an extended period of time, the specimens shall be packaged for transfer to the laboratory before he or she leaves the site.

(h) "Collection Control." To the maximum extent possible, collection site personnel shall keep the individual's specimen containers within sight both before and after the individual has urinated or provided a breath or blood sample. After the specimen is collected and whenever urine specimens are split, they shall be properly sealed and labeled. A chain-of-custody form shall be used for maintaining control and accountability of each specimen from the point of collection to final disposition of the specimen. The date and purpose shall be documented on the chain-of-custody form each time a specimen is handled or transferred, and every individual in the chain of custody shall be identified. Every effort shall be made to minimize the number of persons handling specimens.

(i) "Transportation to Laboratory or Testing Facility." Collection site personnel shall arrange to transfer the collected specimens to the drug testing laboratory or licensee testing facility. To transfer specimens offsite for initial screening and for a second screen and confirmatory analysis of presumptive positive specimens and for transferring suspect specimens to a laboratory for analysis under special processing [Section 2.7(d)], the specimens shall be placed in containers designed to minimize the possibility of damage during shipment (e.g., specimen boxes, padded mailers, or bulk shipping containers with that capability) and those containers shall be securely sealed to eliminate the possibility of undetected tampering. On the tape sealing the container, the collection site person shall sign and enter the date specimens were sealed in the containers for shipment. The collection site personnel shall ensure that the chain-of-custody documentation is attached to each container sealed for shipment to the drug testing laboratory.

(j) "Failure to Cooperate." If the individual refuses to cooperate with the urine collection or breath analysis process (e.g., refusal to provide a complete specimen, complete paperwork, initial specimen), the the collection site person shall inform the Medical Review Officer and shall document the non-cooperation in the permanent record book and on the specimen custody and control form. The Medical Review Officer shall report the failure to cooperate to the appropriate management. The provision of blood specimens for use to confirm a positive breath test for alcohol shall be entirely voluntary, at the individual's discretion. In the absence of a voluntary blood test the second positive breath test shall be considered a confirmed positive.

2.5. HHS-certified Laboratory Personnel.

(a) "Day-to-Day Management of the HHS-certified Laboratories."

(1) The HHS-certified laboratory shall have a qualified individual to assume professional, organizational, educational, and administrative responsibility for the laboratories' drug testing facilities.

(2) This individual shall have documented scientific qualifications in analytical forensic toxicology. Minimum qualifications are:

(i) Certification as a laboratory director by the appropriate State in forensic or clinical laboratory toxicology; or

(ii) A Ph.D. in one of the natural sciences with an adequate undergraduate and graduate education in biology, chemistry, and pharmacology or toxicology, or

(iii) Training and experience comparable to a Ph.D. in one of the natural sciences, such as a medical or scientific degree with additional training and laboratory/research experience in biology, chemistry, and pharmacology or toxicology, and

(iv) In addition to the requirements in (i), (ii), and (iii) above, minimum qualifications also require:

(A) Appropriate experience in analytical forensic toxicology including experience with the analysis of biological material for drugs of abuse; and

(B) Appropriate training and/or experience in forensic applications of analytical toxicology, e.g., publications, court testimony, research concerning analytical toxicology of drugs of abuse, or other factors which qualify the individual as an expert witness in forensic toxicology.

(3) This individual shall be engaged in and responsible for the day-to-day management of the testing laboratory even where another individual has overall responsibility for an entire multispecialty laboratory.

(4) This individual shall be responsible for ensuring that there are enough personnel with adequate training and experience to supervise and conduct the work of their testing laboratories. He or she shall assure the continued competency of laboratory personnel by documenting their inservice training, reviewing their work performance, and verifying their skills.

(5) This individual shall be responsible for the laboratory's having a procedure manual which is complete, up-to-date, available for personnel performing tests, and followed by those personnel. The procedure manual shall be reviewed, signed, and dated by this responsible individual whenever procedures are first placed into use or changed or when a new individual assumes responsibility for management of the laboratory. Copies of all procedures and dates on which they are in effect shall be maintained. (Specific contents of the procedure manual are described in Section 2.7(0) of this appendix).

(6) This individual shall be responsible for maintaining a quality assurance program to assure the proper performance and reporting of all test results; for maintaining acceptable analytical performance for all controls and standards; for maintaining quality control testing; and for assuring and documenting the validity, reliability, accuracy, precision, and performance characteristics of each test and test system.

(7) This individual shall be responsible for taking all remedial actions necessary to maintain satisfactory operation and performance of the laboratory in response to quality control systems not being within performance specifications, errors in result reporting or in analysis of performance testing results. This individual shall ensure that test results are not reported until all corrective actions have been taken and he or she can assure that the test results provided are accurate and reliable.

(b) "Test Validation." The laboratory's urine drug testing facility shall have a qualified individual(s) who reviews all pertinent data and quality control results in order to attest to the validity of the laboratory's test reports. A laboratory may designate more than one person to perform this function.

This individual(s) may be any employee who is qualified to be responsible for day-to-day management or operation of the drug testing laboratory.

(c) "Day-to-Day Operations and Supervision of Analysts." The laboratory's urine drug testing facility shall have an individual to be responsible for day-to-day operations and to supervise the technical analysts. This individual(s) shall have at least a bachelor's degree in the chemical or biological sciences or medical technology or equivalent. He or she shall have training and experience in the theory and practice of the procedures used in the laboratory, resulting in his or her thorough understanding of quality control practices and procedures; the review, interpretation, and reporting of test results; maintenance of chain-of-custody; and proper remedial actions to be taken in response to test systems being out of control limits or detecting aberrant test or quality control results.

(d) "Other Personnel." Other technicians or nontechnical staff shall have the necessary training and skills for the tasks assigned.

(e) "Training." The laboratory's testing program shall make available continuing education programs to meet the needs of laboratory personnel.

(f) "Files." Laboratory personnel files shall include: résumé of training and experience; certification or license, if any; references; job descriptions; records of performance evaluation and advancement; incident reports; and results of tests which establish employee competency for the position he or she holds, such as a test for color blindness, if appropriate.

2.6 Licensee Testing Facility Personnel.

(a) "Day-to-Day Management of Operations." Any licensee testing facility shall have an individual to be responsible for day-to-day operations and to supervise the testing technicians. This individual(s) shall have at least a bachelor's degree in the chemical or biological sciences or medical technology or equivalent. He or she shall have training and experience in the theory and practice of the procedures used in the licensee testing facility, resulting in his or her thorough understanding of quality control practices and procedures; the review, interpretation, and reporting of test results; and proper remedial actions to be taken in response to detecting aberrant test or quality control results.

(b) "Other Personnel." Other technicians or nontechnical staff shall have the necessary training and skills for the tasks assigned.

(c) "Files." Licensees' testing facility personnel files shall include: résumé of training and experience; certification or license, if any; references; job descriptions; records of performance evaluation and advancement; incident reports; results of tests which establish employee competency for the position he or she holds, such as a test for color blindness, if appropriate and appropriate data to support determinations of honesty and integrity conducted in accordance with Section 2.3 of this appendix.

2.7 Laboratory and Testing Facility Analysis Procedures.

(a) "Security and Chain-of-Custody."

(1) HHS-certified drug testing laboratories and any licensee testing facility shall be secure at all times. They shall have in place sufficient security measures to control access to the premises and to ensure that no unauthorized personnel handle specimens or gain access to the laboratory processes or to areas where records and split samples are stored. Access to these secured areas shall be limited to specifically authorized individuals whose authorization is documented. All authorized visitors and maintenance and service personnel shall be escorted at all times in the HHS-certified laboratory and in the licensee's testing facility. Documentation of individuals accessing these areas, dates, and times of entry and purpose of entry must be maintained.

(2) Laboratories and testing facilities shall use chain-of-custody procedures to maintain control and accountability of specimens from receipt through completion of testing, reporting of results, during storage, and continuing until final disposition of specimens. The date and purpose shall be documented on an appropriate chain-of-custody form each time a specimen is handled or transferred, and every individual in the chain shall be identified. Accordingly, authorized technicians shall be responsible for each urine specimen or aliquot in their possession and shall sign and complete chain-of-custody forms for those specimens or aliquots as they are received.

(b) "Receiving."

(1) When a shipment of specimens is received, laboratory and licensee's testing facility personnel shall inspect each package for evidence of possible tampering and compare information on specimen containers within each package to the information on the accompanying chain-of-custody forms. Any direct evidence of tampering or discrepancies in the information on specimen containers and the licensee's chain-of-custody forms attached to the shipment shall be reported within 24 hours to the licensee, in the case of HHS-certified laboratories, and shall be noted on the laboratory's chain-of-custody form which shall accompany the specimens while they are in the laboratory's possession. Indications of tampering with specimens at a testing facility operated by a

licensee shall be reported within 8 hours to senior licensee management.

(2) Specimen containers will normally be retained within the laboratory's or testing facility's accession area until all analyses have been completed. Aliquots and the chain-of-custody forms shall be used by laboratory or testing facility personnel for conducting initial and confirmatory tests, as appropriate.

(c) "Short-Term Refrigerated Storage." Specimens that do not receive an initial test within 7 days of arrival at the laboratory or are not shipped within 6 hours from the licensee's testing facility and any retained split samples shall be placed in secure refrigeration units. Temperatures shall not exceed 6 °C. Emergency power equipment shall be available in case of prolonged power failure.

(d) "Specimen Processing." Urine specimens identified as presumptive positive by a licensee's testing facility shall be shipped to an HHS-certified laboratory for testing. Laboratory facilities for drug testing will normally process urine specimens by grouping them into batches. The number of specimens in each batch may vary significantly depending on the size of the laboratory and its workload. When conducting either initial or confirmatory tests at either the licensee's testing facility or an HHS-certified laboratory, every batch shall contain an appropriate number of standards for calibrating the instrumentation and a minimum of 10 percent controls. Both quality control and blind performance test samples shall appear as ordinary samples to laboratory analysts. Special processing may be conducted to analyze specimens suspected of being adulterated or diluted (including hydration). Any evidence of adulteration or dilution, and any detected trace amounts of drugs or metabolites, shall be reported to the Medical Review Officer.

(e) "Preliminary Initial Test."

(1) For the analysis of urine specimens, any preliminary test performed by a licensee's testing facility and the initial screening test performed by a HHS-certified laboratory shall use an immunoassay which meets the requirements of the Food and Drug Administration for commercial distribution. The initial test of breath for alcohol performed at the collection site shall use a breath measurement device which meets the requirements of Section 2.7(o)(3). The following initial cut-off levels shall be used when screening specimens to determine whether they are negative for the indicated substances:

Initial test cut-off level (ng/ml)

Marijuana metabolites	100
Cocaine metabolites	300
Opiate metabolites	300*
Phencyclidine	25
Amphetamines	1,000
Alcohol	0.04% BAC

*25 ng/ml is immunoassay specific for free morphine.

In addition, licensees may specify more stringent cutoff levels. Results shall be reported for both levels in such cases.

(2) The list of substances to be tested and the cut-off levels are subject to change by the NRC in response to industry experience and changes to the HHS Guidelines made by the Department of Health and Human Services as advances in technology, additional experience, or other considerations warrant the inclusion of additional substances and other concentration levels.

(f) "Confirmatory Test."

(1) Specimens which test negative as a result of this second screening shall be reported as negative to the licensee and will not be subject to any further testing unless special processing of the specimen is desired because adulteration or dilution is suspected.

(2) All urine samples identified as presumptive positive on the screening test performed by a HHS-certified laboratory shall be confirmed using gas chromatography/mass spectrometry (GC/MS) techniques at the cut-off values listed in this paragraph for each drug, and at the cut-off values required by the licensee's unique program, where differences exist. All confirmations shall be by quantitative analysis. Concentrations which exceed the linear region of the standard curve shall be documented in the laboratory record as "greater than highest standard curve value."

Confirmatory test cut-off level (ng/ml)

Marijuana metabolite	15*
Cocaine metabolite	150**
Opiates:	
Morphine	300
Codeine	300
Phencyclidine	25
Amphetamines:	
Amphetamine	500
Methamphetamine	500
Alcohol	0.04% BAC

*Delta-9-tetrahydrocannabinol-9-carboxylic acid.

**Benzoylecgonine.

In addition, licensees may specify more stringent cut-off levels. Results shall be reported for both levels in such cases.

(3) The analytic procedure for confirmatory analysis of blood specimens voluntarily provided by individuals testing positive for alcohol on a breath test shall be gas chromatography analysis.

(4) The list of substances to be tested and the cut-off levels are subject to change by the NRC in response to industry experience and changes to the HHS Guidelines made by the Department of Health and Human

Services as advances in technology, additional experience, or other considerations warrant the inclusion of additional substances and other concentration levels.

(5) Confirmatory tests for opiates shall include a test for 6-monoacetylmorphine (MAM) if the screening test is presumptive positive for morphine.

(g) "Reporting Results."

(1) The HHS-certified laboratory shall report test results to the licensee's Medical Review Officer within 5 working days after receipt of the specimen by the laboratory. Before any test result is reported (the results of initial tests, confirmatory tests, or quality control data), it shall be reviewed and the test certified as an accurate report by the responsible individual at the laboratory. The report shall identify the substances tested for, whether positive or negative, the cut-off(s) for each, the specimen number assigned by the licensee, and the drug testing laboratory specimen identification number. The results (positive and negative) for all specimens submitted at the same time to the laboratory shall be reported back to the Medical Review Officer at the same time when possible.

(2) The HHS-certified laboratory and any licensee testing facility shall report as negative all specimens, except suspect specimens being analyzed under special processing, which are negative on the initial test or negative on the confirmatory test. Specimens testing positive on the confirmatory analysis shall be reported positive for a specific substance. Presumptive positive results of preliminary testing at the licensee's testing facility will not be reported to licensee management.

(3) The Medical Review Officer may routinely obtain from the HHS-certified laboratory, and the laboratory shall provide, quantitation of test results. The Medical Review Officer may only disclose quantitation of test results for an individual to licensee management, if required in an appeals process, or to the individual under the provisions of Section 3.2. (This does not preclude the provision of program performance data under the provisions of 10 CFR 26.71(d).) Quantitation of negative tests for urine specimens shall not be disclosed, except where deemed appropriate by the Medical Review Officer for proper disposition of the results of tests of suspect specimens. Alcohol quantitation for a blood specimen shall be provided to licensee management with the Medical Review Officer's evaluation.

(4) The laboratory may transmit results to the Medical Review Officer by various electronic means (e.g., teleprinters, facsimile, or computer) in a manner designed to ensure confidentiality of the information. Results may not be provided verbally by telephone from HHS-certified laboratory personnel to the Medical Review Officer. The HHS-certified laboratory must ensure the security of the data transmission and limit access to any data transmission, storage, and retrieval system.

(5) The laboratory shall send only to the Medical Review Officer a certified copy of the original chain-of-custody form signed by the individual responsible for day-to-day management of the drug testing laboratory or the individual responsible for attesting to the validity of the test reports and attached to which shall be a copy of the test report.

(6) The HHS-certified laboratory and the licensee's testing facility shall provide to the licensee official responsible for coordination of the fitness-for-duty program a monthly statistical summary of urinalysis and blood testing and shall not include in the summary any personal identifying information. Initial test data from the licensee's testing facility and the HHS-certified laboratory, and confirmation data from HHS-certified laboratories shall be included for test results reported within that month. Normally this summary shall be forwarded from HHS-certified laboratories by registered or certified mail and from the licensee's testing facility not more than 14 calendar days after the end of the month covered by the summary. The summary shall contain the following information:

(i) Initial Testing:

(A) Number of specimens received;

(B) Number of specimens reported out; and

(C) Number of specimens screened positive for:

Marijuana metabolites
Cocaine metabolites
Opiate metabolites
Phencyclidine
Amphetamines
Alcohol

(ii) Confirmatory Testing:

(A) Number of specimens received for confirmation;

(B) Number of specimens confirmed positive for:

Marijuana metabolite
Cocaine metabolite
Morphine, codeine
Phencyclidine
Amphetamine
Methamphetamine
Alcohol

(7) The statistics shall be presented for both the cut-off levels in these guidelines and any more stringent cut-off levels which licensees may specify. The HHS-certified laboratory and the licensee's testing facility shall make available quantitative results for all samples tested when requested by the NRC or the licensee for which the laboratory is performing drug testing services.

(g) Unless otherwise instructed by the licensee in writing, all records pertaining to a given urine or blood specimen shall be retained by the HHS-certified drug testing laboratory and the licensee's testing facility for a minimum of 2 years.

(h) "Long-Term Storage." Long-term frozen storage (−20 °C or less) ensures that positive urine specimens will be available for any necessary retest during administrative or disciplinary proceedings. Unless otherwise authorized in writing by the licensee, HHS-certified laboratories shall retain and place in properly secured long-term frozen storage for a minimum of 1 year all specimens confirmed positive. Within this 1-year period a licensee or the NRC may request the laboratory to retain the specimen for an additional period of time, but if no such request is received, the laboratory may discard the specimen after the end of 1 year, except that the laboratory shall be required to maintain any specimens under legal challenge for an indefinite period. Any split samples retained by the licensee shall be transferred into long-term storage upon determination by the Medical Review Officer that the specimen has a confirmed positive test.

(i) "Retesting Specimens." Because some analytes deteriorate or are lost during freezing and/or storage, quantitation for a retest is not subject to a specific cut-off requirement but must provide data sufficient to confirm the presence of the drug or metabolite.

(j) "Split Samples." Urine specimens may be split, at the licensee's discretion, into two parts at the collection site. One half of such samples (hereafter called the aliquot) shall be analyzed by the licensee's testing facility or the HHS-certified laboratory for the licensee's purposes as described in this appendix. The other half of the sample (hereafter called the split sample) may be withheld from transfer to the laboratory, sealed, and stored in a secure manner by the licensee until the aliquot has been determined to be negative or until the positive result of a screening test has been confirmed. As soon as the aliquot has tested negative, the split sample in storage may be destroyed. If the aliquot tests positive by confirmatory testing, then, at the tested individual's request, the split sample may be forwarded on that day to another HHS-certified laboratory that did not test the aliquot. The chain-of-custody and testing procedures to which the split sample is subject, shall be the same as those used to test the initial aliquot and shall meet the standards for retesting specimens [Section 2.7(i)]. The quantitative results of any second testing process shall be made available to the Medical Review Officer and to the individual tested.

(k) "Subcontracting." HHS-certified laboratories shall not subcontract and shall perform all work with their own personnel and equipment unless otherwise authorized by the licensee. The laboratory must be capable of performing testing of the five classes of drugs (marijuana, cocaine, opiates, phencyclidine, and amphetamines) and of whole blood and confirmatory GC/MS methods specified in these guidelines.

(l) "Laboratory Facilities."

(1) HHS-certified laboratories shall comply with applicable provisions of any State licensure requirements.

(2) HHS-certified laboratories shall have the capability, at the same laboratory premises, of performing initial tests for each drug and drug metabolite for which service is offered, and for performing confirmatory tests for alcohol and for each drug and drug metabolite for which service is offered. Any licensee testing facilities shall have the capability, at the same premises, of performing initial screening tests for each drug and drug metabolite for which testing is conducted. Breath tests for alcohol may be performed at the collection site.

(m) "Inspections." The NRC and any licensee utilizing an HHS-certified laboratory shall reserve the right to inspect the laboratory at any time. Licensee contracts with HHS-certified laboratories for drug testing and alcohol confirmatory testing, as well as contracts for collection site services, shall permit the NRC and the licensee to conduct unannounced inspections. In addition, prior to the award of a contract, the licensee shall carry out pre-award inspections and evaluation of the procedural aspects of the laboratory's drug testing operation. The NRC shall reserve the right to inspect a licensee's testing facility at any time.

(n) "Documentation." HHS-certified laboratories and the licensee's testing facility shall maintain and make available for at least 2 years documentation of all aspects of the testing process. This 2-year period may be extended upon written notification by the NRC or by any licensee for which laboratory services are being provided. The required documentation shall include personnel files on all individuals authorized to have access to specimens; chain-of-custody documents; quality assurance/quality control records; procedure manuals; all test data (including calibration curves and any calculations used in determining test results); reports; performance records on performance testing; performance on certification inspections; and hard copies of computer-generated data. The HHS-certified laboratory and the licensee's testing facility shall be required to maintain documents for any specimen under legal challenge for an indefinite period.

(o) "Additional Requirements for HHS-certified Laboratories and Licensee's Testing Facilities."

(1) "Procedure manual." Each laboratory and licensee's testing facility shall have a procedure manual which includes the principles of each test, preparation of reagents, standards and controls, calibration procedures, derivation of results, linearity of methods, sensitivity of the methods, cutoff values, mechanisms for reporting results, controls, criteria for unacceptable specimens and results, remedial actions to be taken when the test systems are outside of acceptable limits, reagents and expiration dates, and references. Copies of all procedures and dates on which they are in effect shall be maintained as part of the manual. Superseded material must be retained for three years.

(2) "Standards and controls." HHS-certified laboratory standards shall be prepared with pure drug standards which are properly labeled as to content and concentration. The standards shall be labeled with the following dates: when received; when prepared or opened; when placed in service; and expiration date.

(3) "Instruments and equipment."

(i) Volumetric pipettes and measuring devices shall be certified for accuracy or be checked by gravimetric, colorimetric, or other verification procedure. Automatic pipettes and dilutors shall be checked for accuracy and reproducibility before being placed in service and checked periodically thereafter.

(ii) Alcohol breath analysis equipment shall be an evidental-grade breath alcohol analysis device of a brand and model that conforms to National Highway Traffic Safety Administration (NHTSA) standards (49 FR 48855) and to any applicable State statutes.

(iii) There shall be written procedures for instrument set-up and normal operation, a schedule for checking critical operating characteristics for all instruments, tolerance limits for acceptable function checks, and instructions for major troubleshooting and repair. Records shall be available on preventive maintenance.

(4) "Remedial actions." There shall be written procedures for the actions to be taken when systems are out of acceptable limits or errors are detected. There shall be documentation that these procedures are followed and that all necessary corrective actions are taken. There shall also be in place systems to verify all stages of testing and reporting and documentation that these procedures are followed.

(5) "Personnel available to testify at proceedings." The licensee's testing facility and HHS-certified laboratory shall have qualified personnel available to testify in an administrative or disciplinary proceeding against an individual when that proceeding is based on positive breath analysis or urinalysis results reported by the licensee's testing facility or the HHS-certified laboratory.

2.8 Quality Assurance and Quality Control

(a) "General." HHS-certified laboratories and the licensee's testing facility shall have a quality assurance program which encompasses all aspects of the testing process including but not limited to specimen acquisition, chain-of-custody, security, reporting of results, initial and confirmatory testing, and validation of analytical procedures. Quality assurance procedures shall be designed, implemented, and reviewed to monitor the conduct of each step of the process of testing for drugs.

(b) "Licensee's Testing Facility Quality Control Requirements for Initial Tests." Because all positive preliminary tests for drugs are forwarded to an HHS-certified laboratory for screening and confirmatory testing when appropriate, the NRC does not require licensees to assess their testing facility's false positive rates for drugs. To ensure that the rate of false negative tests is kept to the minimum that the immunoassay technology supports, licensees shall process blind performance test specimens and submit a sampling of specimens screened as negative from every test run to the HHS-certified laboratory. In addition, the manufacturer-required performance tests of the breath analysis equipment used by the licensee shall be conducted as set forth in the manufacturer's specifications.

(c) "Laboratory Quality Control Requirements for Initial Tests at HHS-Certified Laboratories." Each analytical run of specimens to be screened shall include:

(1) Urine specimens certified to contain no drug;

(2) Urine specimens fortified with known standards; and

(3) Positive controls with the drug or metabolite at or near the threshold (cut-off).

In addition, with each batch of samples, a sufficient number of standards shall be included to ensure and document the linearity of the assay method over time in the concentration area of the cut-off. After acceptable values are obtained for the known standards, those values will be used to calculate sample data. Implementation of procedures to ensure that carryover does not contaminate the testing of an individual's specimen shall be documented. A minimum of 10 percent of all test samples shall be quality control specimens. Laboratory quality control samples, prepared from spiked urine samples of determined concentration, shall be included in the run and should appear as normal samples to laboratory analysts. One percent of each run, with a minimum of at least one sample, shall be the laboratory's own quality control samples.

(d) "Laboratory Quality Control Requirements for Confirmation Tests." Each analytical run of specimens to be confirmed shall include:

(1) Urine specimens certified to contain no drug;

(2) Urine specimens fortified with known standards; and

(3) Positive controls with the drug or metabolite at or near the threshold (cut-off).

The linearity and precision of the method shall be periodically documented. Implementation of procedures to ensure that carryover does not contaminate the testing of an individual's specimen shall also be documented.

(e) "Licensee Blind Performance Test Procedures."

(1) Licensees shall purchase chemical testing services only from laboratories certified by DHHS or a DHHS-recognized certification program in accordance with the HHS Guidelines. Laboratory participation is encouraged in other performance testing surveys by which the laboratory's performance is compared with peers and reference laboratories.

(2) During the initial 90-day period of any new drug testing program, each licensee shall submit blind performance test specimens to each HHS-certified laboratory it contracts within the amount of at least 50 percent of the total number of samples submitted (up to a maximum of 500 samples) and thereafter a minimum of 10 percent of all samples (to a maximum of 250) submitted per quarter.

(3) Approximately 80 percent of the blind performance test samples shall be blank (i.e., certified to contain no drug) and the remaining samples shall be positive for one or more drugs per sample in a distribution such that all the drugs to be tested are included in approximately equal frequencies of challenge. The positive samples shall be spiked only with those drugs for which the licensee is testing.

(4) The licensee shall investigate, or shall refer to DHHS for investigation, any unsatisfactory performance testing result, and based on this investigation, the laboratory shall take action to correct the cause of the unsatisfactory performance test result. A record shall be made of the investigative findings and the corrective action taken by the laboratory, and that record shall be dated and signed by the individuals responsible for the day-to-day management and operation of the HHS-certified laboratory. Then the licensee shall send the document to the NRC as a report of the unsatisfactory performance testing incident within 30 days. The NRC shall ensure notification of the finding to DHHS.

(5) Should a false positive error occur on a blind performance test specimen and the error is determined to be an administrative error (clerical, sample mixup, etc.), the licensee shall promptly notify the NRC. The licensees shall require the laboratory to take corrective action to minimize the occurrence of the particular error in the future; and, if there is reason to believe the error could have been systematic, the licensee may also require review and reanalysis of previously run specimens.

(6) Should a false positive error occur on a blind performance test specimen and the error is determined to be a technical or methodological error, the licensee shall instruct the laboratory to submit to them all quality control data from the batch of specimens which included the false positive specimen. In addition, the licensee shall require the laboratory to retest all specimens analyzed positive for that drug or metabolite from the time of final resolution of the error back to the time of the last satisfactory performance test cycle. This retesting shall be documented by a statement signed by the individual responsible for day-to-day management of the laboratory's substance testing program. The licensee and the NRC may require an on-site review of the laboratory which may be conducted unannounced during any hours of operation of the laboratory. Based on information provided by the NRC, DHHS has the option of revoking or suspending the laboratory's certification or recommending that no further action be taken if the case is one of less serious error in which corrective action has already been taken, thus reasonably assuring that the error will not occur again.

2.9 Reporting and Review of Results

(a) "Medical Review Officer shall review results." An essential part of the licensees' testing programs is the final review of results. A positive test result does not automatically identify a nuclear power plant worker as having used substances in violation of the NRC's regulations or the licensee's company policies. An individual with a detailed knowledge of possible alternate medical explanations is essential to the review of results. This review shall be performed by the Medical Review Officer prior to the transmission of results to licensee management officials.

(b) "Medical Review Officer—qualifications and responsibilities." The Medical Review Officer shall be a licensed physician with knowledge of substance abuse disorders and may be a licensee or contract employee. The role of the Medical Review Officer is to review and interpret positive test results obtained through the licensee's testing program. In carrying out this responsibility, the Medical Review Officer shall examine alternate medical explanations for any positive test result (this does not include confirmation of blood alcohol levels obtained through the use of a breath alcohol anaylsis device). This action could include conducting a medical interview with the individual, review of the individual's medical history, or review of any other relevant biomedical factors. The Medical Review Officer shall review all medical records made available by the tested individual when a confirmed positive test could have resulted from legally prescribed medication. The Medical Review Officer shall not consider the results of tests that are not obtained or processed in accordance with these Guidelines, although he or she may consider the results of tests on split samples in making his or her determination, as long as those split samples have been stored and tested in accordance with the procedures described in these Guidelines.

(c) "Positive Test Results." Prior to making a final decision to verify a positive test result, the Medical Review Officer shall give the individual an opportunity to discuss the test result with him or her. Following verification of a positive test result, the Medical Review Officer shall, as provided in the licensee's policy, notify the applicable employee assistance program and the licensee's management official empowered to recommend or take administrative action (or the official's designated agent).

(d) "Verification for opiates; review for prescription medication." Before the Medical Review Officer verifies a confirmed positive result and the licensee takes action for opiates, he or she shall determine that there is clinical evidence—in addition to the urine test—of unauthorized use of any opium, opiate, or opium derivative (e.g., morphine/codeine). Clinical signs of abuse include recent needle tracks or behavioral and psychological signs of acute opiate intoxication or withdrawal. This requirement does not apply if the GC/MS confirmation testing for opiates confirms the presence of 6-monoacetylmorphine. For other drugs that are commonly prescribed or commonly included in over-the-counter preparations (e.g., benzodiazepines in the first case, barbiturates in the second) and that are listed in the licensee's panel of substances to be tested, the Medical Review Officer shall also determine whether there is clinical evidence—in addition to the urine test—of unauthorized use of any of these substances or their derivatives.

(e) "Reanalysis authorized." Should any question arise as to the accuracy or validity of a positive test result, only the Medical Review Officer is authorized to order a reanalysis of the original sample and such retests are authorized only at laboratories certified by DHHS. The Medical Review Officer shall authorize a reanalysis of the original aliquot on timely request of the individual tested, and shall also authorize an analysis of any sample stored by the licensee.

(f) "Results consistent with responsible substance use." If the Medical Review Officer determines that there is a legitimate medical explanation for the positive test result and that use of the substance identified through testing in the manner and at the dosage prescribed does not reflect a lack of reliability and is unlikely to create on-the-job impairment, the Medical Review Officer shall report the test result to the licensee as negative.

(g) "Result scientifically insufficient." Additionally, the Medical Review Officer, based on review of inspection reports, quality control data, multiple samples, and other pertinent results, may determine that the result is scientifically insufficient for further action and declare the test specimen negative. In this situation, the Medical Review Officer may request reanalysis of the original sample before making this decision. (The Medical Review Officer may request that reanalysis be performed by the same laboratory or, that an aliquot of the original specimen be sent for reanalysis to an alternate laboratory which is certified in accordance with the HHS Guidelines.) The licensee's testing facility and the HHS-certified laboratory shall assist in this review process as requested by the Medical Review Officer by making available the individual(s) responsible for day-to-day management of the licensee's test facility, of the HHS-certified laboratory or other individuals who are forensic toxicologists or who have equivalent forensic experience in urine drug testing, to provide specific consultation as required by the licensee. The licensee shall maintain records that summarize any negative findings based on scientific insufficiency and shall make them available to the NRC on request, but shall not include any personal identifying information in such reports.

Subpart C—Employee Protection

3.1 Protection of Employee Records

Licensee contracts with HHS certified laboratories and procedures for the licensee's testing facility shall require that test records be maintained in confidence, as provided in 10 CFR 26.29. Records shall be maintained and used with the highest regard for individual privacy.

3.2 Individual Access to Test and Laboratory Certification Results

Any individual who is the subject of a drug or alcohol test under this part shall, upon written request, have access to any records relating to his or her tests and any records relating to the results of any relevant laboratory certification, review, or revocation-of-certification proceedings.

Subpart D—Certification of Laboratories Engaged in Chemical Testing

4.1 Use of DHHS-certified laboratories

(a) Licensees subject to this part and their contractors shall use only laboratories certified under the DHHS "Mandatory Guidelines for Federal Workplace Drug Testing Programs", Subpart C—"Certification of Laboratories Engaged in Urine Drug Testing for Federal Agencies," (53 FR 11970, 11986-11989) dated April 11, 1988, and subsequent amendments thereto for screening and confirmatory testing except for initial screening tests at a licensee's testing facility conducted in accordance with 10 CFR 26.24(d). Information concerning the current certification status of laboratories is available from: The Office of Workplace Initiatives, National Institute on Drug Abuse, 5600 Fishers Lane, Rockville, Maryland 20857.

(b) Licensees or their contractors may use only HHS-certified laboratories that agree to follow the same rigorous chemical testing, quality control, and chain-of-custody procedures when testing for more stringent cut-off levels as may be specified by licensees for the classes of drugs identified in this Part, for analysis of blood specimens for alcohol, and for any other substances included in licensees' drug panels.

PART 30—RULES OF GENERAL APPLICABILITY TO DOMESTIC LICENSING OF BYPRODUCT MATERIAL

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APPENDIX A—CRITERIA RELATING TO USE OF FINANCIAL TESTS AND PARENT COMPANY GUARANTEES FOR PROVIDING REASONABLE ASSURANCE OF FUNDS FOR DECOMMISSIONING

AUTHORITY: Secs. 81, 82, 161, 182, 183, 186, 68 Stat. 935, 948, 953, 954, 955, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2111, 2112, 2201, 2232, 2233, 2236, 2282); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

Section 30.7 also issued under Public Law 95-601, sec. 10, 92 Stat. 2951 (42 U.S.C. 5851). Section 30.34(b) also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 30.61 also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273); §§ 30.3, 30.34

(b), (c),(f), g) and (i), 30.41 (a) and (c), and 30.53 are issued under secs. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201(b); and §§ 30.6, 30.9, 30.34(g), 30.36, 30.51, 30.52, 30.55, and 30.56 (b) and (c) are issued under sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

GENERAL PROVISIONS

§ 30.1 Purpose and scope.

This part prescribes rules applicable to all persons in the United States governing domestic licensing of byproduct material under the Atomic Energy Act of 1954, as amended (68 Stat. 919), and under Title II of the Energy Reorganization Act of 1974 (88 Stat. 1242), and exemptions from the domestic licensing requirements permitted by section 81 of the Act.

[40 FR 8784, Mar. 3, 1975, as amended at 43 FR 6921, Feb. 17, 1978]

§ 30.2 Resolution of conflict.

The requirements of this part are in addition to, and not in substitution for, other requirements of this chapter. In any conflict between the requirements in this part and a specific requirement in another part of the regulations in this chapter, the specific requirement governs.

[30 FR 8185, June 26, 1965]

§ 30.3 Activities requiring license.

Except for persons exempt as provided in this part and Part 150 of this chapter, no person shall manufacture, produce, transfer, receive, acquire, own, possess, or use byproduct material except as authorized in a specific or general license issued pursuant to the regulations in this chapter.

[30 FR 8185, June 26, 1965, as amended at 43 FR 6921, Feb. 17, 1978]

§ 30.4 Definitions.

Act means the Atomic Energy Act of 1954 (68 Stat. 919), including any amendments thereto;

Agreement State means any state with which the Atomic Energy Commission or the Nuclear Regulatory Commission has entered into an effective agreement under subsection 274b. of the Act. *Non-agreement State* means any other State;

Alert means events may occur, are in progress, or have occurred that could lead to a release of radioactive material but that the release is not expected to require a response by offsite response organizations to protect persons offsite.

Byproduct material means any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material;

Commencement of construction means any clearing of land, excavation, or other substantial action that would adversely affect the natural environment of a site but does not include changes desirable for the temporary use of the land for public recreational uses, necessary borings to determine site characteristics or other preconstruction monitoring to establish background information related to the suitability of a site or to the protection of environmental values.

Commission means the Nuclear Regulatory Commission and its duly authorized representatives;

Curie means that amount of radioactive material which disintegrates at the rate of 37 billion atoms per second;

Decommission means to remove (as a facility) safely from service and reduce residual radioactivity to a level that permits release of the property for unrestricted use and termination of license.

Dentist means an individual licensed by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to practice dentistry.

Department and *Department of Energy* means the Department of Energy established by the Department of Energy Organization Act (Pub. L. 95-91, 91 Stat. 565, 42 U.S.C. 7101 *et seq.*) to the extent that the Department, or its duly authorized representatives, exercises functions formerly vested in the U.S. Atomic Energy Commission, its Chairman, members, officers and components and transferred to the U.S. Energy Research and Development Administration and to the Administrator thereof pursuant to sections 104 (b), (c) and (d) of the Energy Reorganization Act of 1974

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(Pub. L. 93-438, 88 Stat. 1233 at 1237, 42 U.S.C. 5814) and retransferred to the Secretary of Energy pursuant to section 301(a) of the Department of Energy Organization Act (Pub. L. 95-91, 91 Stat. 565 at 577-578, 42 U.S.C. 7151).

Effective dose equivalent means the sum of the products of the dose equivalent to the organ or tissue and the weighting factors applicable to each of the body organs or tissues that are irradiated. Weighting actors are: 0.25 for gonads, 0.15 for breast, 0.12 for red bone marrow, 0.12 for lungs, 0.03 for thyroid, 0.03 for bone surface, and 0.06 for each of the other five organs receiving the highest dose equivalent.

Government agency means any executive department, commission, independent establishment, corporation, wholly or partly owned by the United States of America which is an instrumentality of the United States, or any board, bureau, division, service, office, officer, authority, administration, or other establishment in the executive branch of the Government;

License, except where otherwise specified means a license for by- product material issued pursuant to the regulations in this part and Parts 31 through 35 and 39 of this chapter;

Medical use means the intentional internal or external administration of byproduct material, or the radiation therefrom, to human beings in the practice of medicine in accordance with a license issued by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico.

Microcurie means that amount of radioactive material which disintegrates at the rate of 37 thousand atoms per second,

Millicurie means that amount of radioactive material which disintegrates at the rate of 37 million atoms per second;

Person means: (1) Any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, Government agency other than the Commission or the Department, except that the Department shall be considered a person within the meaning of the regulations in this part to the extent that its facilities and activities are subject to the licensing and related regulatory authority of the Commission pursuant to section 202 of the Energy Reorganization Act of 1974 (88 Stat. 1244),[1] any State or any political subdivision of or any political entity within a State, any foreign government or nation or any political subdivision of any such government or nation, or other entity; and (2) any legal successor, representative, agent, or agency of the foregoing;

Physician means a medical doctor or doctor of osteopathy licensed by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to prescribe drugs in the practice of medicine;

Podiatrist means an individual licensed by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to practice podiatry.

Production facility means production facility as defined in the regulations contained in Part 50 of this chapter;

Radiographer means any individual who performs or who, in attendance at the site where the sealed source or sources are being used, personally supervises radiographic operations and who is responsible to the licensee for assuring compliance with the requirements of the Commission's regulations and the conditions of the license;

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[1] The Department facilities and activities identified in section 202 are:

(1) Demonstration Liquid Metal Fast Breeder reactors when operated as part of the power generation facilities of an electric utility system, or when operated in any other manner for the purpose of demonstrating the suitability for commercial application of such a reactor.

(2) Other demonstration nuclear reactors, except those in existence on January 19, 1975, when operated as part of the power generation facilities of an electric utility system, or when operated in any other manner for the purpose of demonstrating the suitability for commercial application of such a reactor.

(3) Facilities used primarily for the receipt and storage of high-level radioactive wastes resulting from licensed activities.

(4) Retrievable Surface Storage Facilities and other facilities authorized for the express purpose of subsequent long-term storage of high-level radioactive waste generated by the Department, which are not used for, or are part of, research and development activities.

Radiographer's assistant means any individual who, under the personal supervision of a radiographer, uses radiographic exposure devices, sealed sources or related handling tools, or radiation survey instruments in radiography;

Radiography means the examination of the structure of materials by nondestructive methods, utilizing sealed sources of byproduct materials;

Research and development means: (1) Theoretical analysis, exploration, or experimentation; or (2) the extension of investigative findings and theories of a scientific or technical nature into practical application for experimental and demonstration purposes, including the experimental production and testing of models, devices, equipment, materials and processes. "Research and development" as used in this part and Parts 31 through 35 does not include the internal or external administration of byproduct material, or the radiation therefrom, to human beings;

Sealed source means any byproduct material that is encased in a capsule designed to prevent leakage or escape of the byproduct material;

Site area emergency means events may occur, are in progress, or have occurred that could lead to a significant release of radioactive material and that could require a response by offsite response organizations to protect persons offsite.

Source material means source material as defined in the regulations contained in Part 40 of this chapter;

Special nuclear material means special nuclear material as defined in the regulations contained in Part 70 of this chapter;

United States, when used in a geographical sense, includes Puerto Rico and all territories and possessions of the United States;

Utilization facility means a utilization facility as defined in the regulations contained in Part 50 of this chapter;

[30 FR 8185, June 26, 1965, as amended at 36 FR 1466, Jan. 30, 1971; 37 FR 5746, Mar. 21, 1972; 38 FR 29314, Oct. 24, 1973; 40 FR 8784, Mar. 3, 1975; 43 FR 6921, Feb. 17, 1978; 45 FR 14200, Mar. 5, 1980; 45 FR 18905, Mar. 24, 1980; 48 FR 39037, Aug. 29, 1983; 51 FR 36967, Oct. 16, 1986; 52 FR 8241, Mar. 17, 1987; 53 FR 24044, June 27, 1988; 54 FR 14059, Apr. 7, 1989]

§ 30.5 Interpretations.

Except as specifically authorized by the Commission in writing, no interpretation of the meaning of the regulations in this part and Parts 31 through 35 and 39 by any officer or employee of the Commission other than a written interpretation by the General Counsel will be recognized to be binding upon the Commission.

[30 FR 8185, June 26, 1965, as amended at 43 FR 6921, Feb. 17, 1978; 52 FR 8241, Mar. 17, 1987]

§ 30.6 Communications.

(a) Unless otherwise specified or covered under the regional licensing program as provided in paragraph (b) of this section, any communication or report concerning the regulations in Parts 30 through 35 and 39 of this chapter and any application filed under these regulations may be submitted to the Commission as follows:

(1) By mail addressed to: Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

(2) By delivery in person to the Commission's offices to the Director, Office of Nuclear Material Safety and Safeguards at:

(i) 2120 L Street, NW., Washington, D.C.; or

(ii) 11555 Rockville Pike, One White Flint North, Rockville, Maryland.

(b) The Commission has delegated to the five Regional Administrators licensing authority for selected parts of its decentralized licensing program for nuclear materials as described in paragraph (b)(1) of this section. Any communication, report, or application covered under this licensing program must be submitted as specified in paragraph (b)(2) of this section.

(1) The delegated licensing program includes authority to issue, renew, amend, cancel, modify, suspend, or revoke licenses for nuclear materials issued pursuant to 10 CFR Parts 30

through 35, 39, 40, and 70 to all persons for academic, medical, and industrial uses, with the following exceptions:

(i) Activities in the fuel cycle and special nuclear material in quantities sufficient to constitute a critical mass in any room or area. This exception does not apply to license modifications relating to termination of special nuclear material licenses that authorize possession of larger quantities when the case is referred for action from NRC's Headquarters to the Regional Administrators.

(ii) Health and safety design review of sealed sources and devices and approval, for licensing purposes, of sealed sources and devices.

(iii) Processing of source material for extracting of metallic compounds (including Zirconium, Hafnium, Tantalum, Titanium, Niobium, etc.).

(iv) Distribution of products containing radioactive material to persons exempt pursuant 10 CFR 32.11 through 32.26.

(v) New uses or techniques for use of byproducts, source, or special nuclear material.

(2) *Submissions*—(i) *Region I.* The regional licensing program involves all Federal facilities in the region and non-Federal licensees in the following Region I non-Agreement States and the District of Columbia: Connecticut, Delaware, Maine, Massachusetts, New Jersey, Pennsylvania, and Vermont. All inquiries, communications, and application for a new license or an amendment or renewal of an existing license specified in paragraph (b)(1) of this section must be sent to: U.S. Nuclear Regulatory Commission, Region I, Nuclear Material Section B, 475 Allendale Road, King of Prussia, Pennsylvania 19406.

(ii) *Region II.* The regional licensing program involves all Federal facilities in the region and non-Federal licensees in the following Region II non-Agreement States and territories: Virginia, West Virginia, Puerto Rico, and the Virgin Islands. All inquiries, communications, and applications for a new license or an amendment or renewal of an existing license specified in paragraph (b)(1) of this section must be sent to U.S. Nuclear Regulatory Commission, Region II, Material Radiation Protection Section, 101 Marietta Street, NW, Suite 2900, Atlanta, Georgia 30323.

(iii) *Region III.* The regional licensing program involves all Federal facilities in the region and non-Federal licensees in the following Region III non-Agreement States: Indiana, Michigan, Minnesota, Minnesota, Missouri, Ohio, and Wisconsin. All inquiries, communications, and applications for a new license or an amendment or renewal of an existing license specified in paragraph (b)(1) of this section must be sent to: U.S. Nuclear Regulatory Commission, Region III, Material Licensing Section, 799 Roosevelt Road, Glen Ellyn, Illinois 60137.

(iv) *Region IV.* The regional licensing program involves all Federal facilities in the region and non-Federal licensees in the following Region IV non-Agreement States: Montana, Oklahoma, South Dakota, and Wyoming. All inquiries, communications, and applications for a new license or an amendment or renewal of an existing license specified in paragraph (b)(1) of this section must be sent to: U.S. Nuclear Regulatory Commission, Region IV, Material Radiation Protection Section, 611 Ryan Plaza Drive, Suite 1000, Arlington, Texas 76011.

(v) *Region V.* The regional licensing program involves all Federal facilities in the region and non-Federal licensees in the following Region V non-Agreement States and a territory: Alaska, Hawaii, and Guam. All inquiries, communications, and applications for a new license or an amendment or renewal of an existing license specified in paragraph (b)(1) of this section must be sent to: U.S. Nuclear Regulatory Commission, Region V, Material Radiation Protection Section, 1450 Maria Lane, Suite 210, Walnut Creek, California 94596.

[48 FR 16031, Apr. 14, 1983, as amended at 49 FR 19630, May 9, 1984; 49 FR 47824, Dec. 7, 1984; 50 FR 14693, Apr. 11, 1985; 51 FR 36000, Oct. 8, 1986; 52 FR 8241, Mar. 17, 1987; 52 FR 38392, Oct. 16, 1987; 52 FR 48093, Dec. 18, 1987; 53 FR 3862, Feb. 10, 1988; 53 FR 4110, Feb. 12, 1988; 53 FR 43420, Oct. 27, 1988]

§ 30.7 Employee protection.

(a) Discrimination by a Commission licensee, an applicant for a Commission license, or a contractor or subcontractor of a Commission licensee or applicant against an employee for engaging in certain protected activities is prohibited. Discrimination includes discharge and other actions that relate to compensation, terms, conditions, and privileges of employment. The protected activities are established in section 210 of the Energy Reorganization Act of 1974, as amended, and in general are related to the administration or enforcement of a requirement imposed under the Atomic Energy Act or the Energy Reorganization Act.

(1) The protected activities include but are not limited to:

(i) Providing the Commission information about possible violations of requirements imposed under either of the above statutes;

(ii) Requesting the Commission to institute action against his or her employer for the administration or enforcement of these requirements; or

(iii) Testifying in any Commission proceeding.

(2) These activities are protected even if no formal proceeding is actually initiated as a result of the employee assistance or participation.

(3) This section has no application to any employee alleging discrimination prohibited by this section who, acting without direction from his or her employer (or the employer's agent), deliberately causes a violation of any requirement of the Energy Reorganization Act of 1974, as amended, or the Atomic Energy Act of 1954, as amended.

(b) Any employee who believes that he or she has been discharged or otherwise discriminated against by any person for engaging in the protected activities specified in paragraph (a)(1) of this section may seek a remedy for the discharge or discrimination through an administrative proceeding in the Department of Labor. The administrative proceeding must be initiated within 30 days after an alleged violation occurs by filing a complaint alleging the violation with the Department of Labor, Employment Standards Administration, Wage and Hour Division. The Department of Labor may order reinstatement , back pay, and compensatory damages.

(c) A violation of paragraph (a) or paragraph (g) of this section by a Commission licensee, an applicant for a Commission license, or a contractor or subcontractor of a Commission licensee or applicant may be grounds for—

(1) Denial, revocation, or suspension of the license.

(2) Imposition of a civil penalty on the licensee or applicant.

(3) Other enforcement action.

(d) Actions taken by an employer, or others, which adversely affect an employee may be predicated upon nondiscriminatory grounds. The prohibition applies when the adverse action occurs because the employee has engaged in protected activities. An employee's engagement in protected activities does not automatically render him or her immune from discharge or discipline for legitimate reasons or from adverse action dictated by nonprohibited considerations.

(e) Each licensee and each applicant shall post Form NRC-3, "Notice to Employees," on its premises. Posting must be at locations sufficient to permit employees protected by this section to observe a copy on the way to or from their place of work. Premises must be posted not later than 30 days after an application is docketed and remain posted while the application is pending before the Commission, during the term of the license, and for 30 days following license termination.

NOTE: Copies of Form NRC-3 may be obtained by writing to the Regional Administrator of the appropriate U.S. Nuclear Regulatory Commission Regional Office listed in Appendix D, Part 20 of this chapter.

(f) The general licenses provided in Parts 31 and 35 of this chapter are exempt from paragraph (e) of this section.

(g) No agreement affecting the compensation, terms, conditions and privileges of employment, including an agreement to settle a complaint filed by an employee with the Department of Labor pursuant to section 210 of the Energy Reorganization Act of

1974, may contain any provision which would prohibit, restrict, or otherwise discourage, an employee from participating in protected activity as defined in paragraph (a)(1) of this section, including, but not limited to, providing information to the NRC on potential violations or other matters within NRC's regulatory responsibilities.

[47 FR 30454, July 14, 1982, as amended at 52 FR 31611, Aug. 21, 1987; 55 FR 10404, Mar. 21, 1990]

§ 30.8 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 (U.S.C. 3501 et seq). OMB has approved the information collection requirements contained in this part under control number 3150-0017.

(b) The approved information collection requirements contained in this part appear in §§ 30.15, 30.19, 30.20, 30.32, 30.34, 30.36, 30.37, 30.38, 30.51, 30.55, and 30.56.

(c) This part contains information collection requirements in addition to those approved under the control number specified in paragraph (a) of this section. These information collection requirements and the control numbers under which they are approved are as follows:

(1) In §§ 30.32, 30.37, and 30.38, Form NRC-313I is approved under control number 3150-0042.

(2) In §§ 30.32, 30.37, and 30.38, Form NRC-313T is approved under control number 3150-0081.

(3) In § 30.36, Form NRC-314 is approved under control number 3150-0028.

(4) In §§ 30.37 and 30.38, Form NRC-313M is approved under control number 3150-0041.

(5) In §§30.37 and 30.38, Form NRC-313R is approved under control number 3150-0023.

[49 FR 19625, May 9, 1984]

§ 30.9 Completeness and accuracy of information.

(a) Information provided to the Commission by an applicant for a license or by a licensee or information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.

(b) Each applicant or licensee shall notify the Commission of information identified by the applicant or licensee as having for the regulated activity a significant implication for public health and safety or common defense and security. An applicant or licensee violates this paragraph only if the applicant or licensee fails to notify the Commission of information that the applicant or licensee has identified as having a significant implication for public health and safety or common defense and security. Notification shall be provided to the Administrator of the appropriate Regional Office within two working days of identifying the information. This requirement is not applicable to information which is already required to be provided to the Commission by other reporting or updating requirements.

[52 FR 49371, Dec. 31, 1987]

EXEMPTIONS

§ 30.11 Specific exemptions.

(a) The Commission may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this part and Parts 31 through 35 and 39 of this chapter as it determines are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest.

(b) [Reserved]

(c) The DOE is exempt from the requirements of this part to the extent that its activities are subject to the requirements of Part 60 of this chapter.

(d) Except as specifically provided in Part 61 of this chapter, any licensee is exempt from the requirements of this part to the extent that its activities are subject to the requirements of Part 61 of this chapter.

[37 FR 5746, Mar. 21, 1972, as amended at 39 FR 26279, July 18, 1974; 40 FR 8784, Mar. 3, 1975; 43 FR 6921, Feb. 21, 1978; 45 FR 65530, Oct. 3, 1980; 46 FR 13979, Feb. 25, 1981; 47 FR 57480, Dec. 27, 1982; 52 FR 8241, Mar. 17, 1987]

§ 30.12 Persons using byproduct material under certain Department of Energy and Nuclear Regulatory Commission contracts.

Except to the extent that Department facilities or activities of the types subject to licensing pursuant to section 202 of the Energy Reorganization Act of 1974 are involved, any prime contractor of the Department is exempt from the requirements for a license set forth in sections 81 and 82 of the Act and from the regulations in this part to the extent that such contractor, under his prime contract with the Department manufactures, produces, transfers, receives, acquires, owns, possesses, or uses byproduct material for:

(a) The performance of work for the Department at a United States Government-owned or controlled site, including the transportation of byproduct material to or from such site and the performance of contract services during temporary interruptions of such transportation;

(b) Research in, or development, manufacture, storage, testing or transportation of, atomic weapons or components thereof; or

(c) The use or operation of nuclear reactors or other nuclear devices in a United States Government-owned vehicle or vessel.

In addition to the foregoing exemptions and subject to the requirement for licensing of Department facilities and activities pursuant to section 202 of the Energy Reorganization Act of 1974, any prime contractor or subcontractor of the Department or the Commission is exempt from the requirements for a license set forth in sections 81 and 82 of the Act and from the regulations in this part to the extent that such prime contractor or subcontractor manufacturers, produces, transfers, receives, acquires, owns, possesses, or uses byproduct material under his prime contract or subcontract when the Commission determines that the exemption of the prime contractor or subcontractor is authorized by law; and that, under the terms of the contract or subcontract, there is adequate assurance that the work thereunder can be accomplished without undue risk to the public health and safety.

[40 FR 8784, Mar. 3, 1975, as amended at 43 FR 6921, Feb. 17, 1978]

§ 30.13 Carriers.

Common and contract carriers, freight forwarders, warehousemen, and the U.S. Postal Service are exempt from the regulations in this part and Parts 31 through 35 and 39 of this chapter and the requirements for a license set forth in section 81 of the Act to the extent that they transport or store byproduct material in the regular course of carriage for another or storage incident thereto.

[37 FR 3985, Feb. 25, 1972, as amended at 43 FR 6921, Feb. 17, 1978; 52 FR 8241, Mar. 17, 1987]

§ 30.14 Exempt concentrations.

(a) Except as provided in paragraphs (c) and (d) of this section, any person is exempt from the requirements for a license set forth in section 81 of the Act and from the regulations in this part and Parts 31 through 35 and 39 of this chapter to the extent that such person receives, possesses, uses, transfers, owns or acquires products or materials containing byproduct material in concentrations not in excess of those listed in § 30.70.

(b) This section shall not be deemed to authorize the import of byproduct material or products containing byproduct material.

(c) A manufacturer, processor, or producer of a product or material in an agreement State is exempt from the requirements for a license set forth in section 81 of the Act and from the regulations in this part and Parts 31, 32, 33, 34 and 39 of this chapter to the extent that he transfers byproduct material contained in a product or material in concentrations not in excess of those specified in § 30.70 and introduced into the product or material by a licensee holding a specific license issued by an agreement State, the Commission, or the Atomic Energy Commission expressly authorizing such introduction. This exemption does not apply to the transfer of byproduct material contained in any food, beverage, cosmetic, drug, or other commodity or product designed for ingestion or inhalation by, or application to, a human being.

(d) No person may introduce byproduct material into a product or material knowing or having reason to believe that it will be transferred to persons exempt under this section or equivalent regulations of an Agreement State, except in accordance with a license issued pursuant to § 32.11 of this chapter or the general license provided in § 150.20 of this chapter.

[30 FR 8185, June 26, 1965, as amended at 40 FR 8785, Mar. 3, 1975; 43 FR 6921, Feb. 17, 1978; 52 FR 8241, Mar. 17, 1987]

§ 30.15 Certain items containing byproduct material.

(a) Except for persons who apply byproduct material to, or persons who incorporate byproduct material into, the following products, or persons who initially transfer for sale or distribution the following products containing byproduct material, any person is exempt from the requirements for a license set forth in section 81 of the Act and from the regulations in Parts 20 and 30 through 35 and 39 of this chapter to the extent that such person receives, possesses, uses, transfers, owns, or acquires the following products:

(1) Timepieces or hands or dials containing not more than the following specified quantities of byproduct material and not exceeding the following specified levels of radiation:

(i) 25 millicuries of tritium per timepiece,

(ii) 5 millicuries of tritium per hand,

(iii) 15 millicuries of tritium per dial (bezels when used shall be considered as part of the dial),

(iv) 100 microcuries of promethium 147 per watch or 200 microcuries of promethium 147 per any other timepiece,

(v) 20 microcuries of promethium 147 per watch hand or 40 microcuries of promethium 147 per other timepiece hand,

(vi) 60 microcuries of promethium 147 per watch dial or 120 microcuries of promethium 147 per other timepiece dial (bezels when used shall be considered as part of the dial),

(vii) The levels of radiation from hands and dials containing promethium 147 will not exceed, when measured through 50 milligrams per square centimeter of absorber:

(*a*) For wrist watches, 0.1 millirad per hour at 10 centimeters from any surface,

(*b*) For pocket watches, 0.1 millirad per hour at 1 centimeter from any surface,

(*c*) For any other timepiece, 0.2 millirad per hour at 10 centimeters from any surface.

(2) Lock illuminators containing not more than 15 millicuries of tritium or not more than 2 millicuries of promethium 147 installed in automobile locks. The levels of radiation from each lock illuminator containing promethium 147 will not exceed 1 millirad per hour at 1 centimeter from any surface when measured through 50 milligrams per square centimeter of absorber.

(3) Balances of precision containing not more than 1 millicurie of tritium per balance or not more than 0.5 millicurie of tritium per balance part.

(4) Automobile shift quadrants containing not more than 25 millicuries of tritium.

(5) Marine compasses containing not more than 750 millicuries of tritium gas and other marine navigational instruments containing not more than 250 millicuries of tritium gas.

(6) Thermostat dials and pointers containing not more than 25 millicuries of tritium per thermostat.

(7) [Reserved]

(8) Electron tubes: *Provided*, That each tube does not contain more than one of the following specified quantities of byproduct material:

(i) 150 millicuries of tritium per microwave receiver protector tube or 10 millicuries of tritium per any other electron tube;

(ii) 1 microcurie of cobalt-60;

(iii) 5 microcuries of nickel-63;

(iv) 30 microcuries of krypton-85;

(v) 5 microcuries of cesium-137;

(vi) 30 microcuries of promethium-147;

And provided further, That the levels of radiation from each electron tube containing byproduct material do not exceed 1 millirad per hour at 1 centimeter from any surface when measured through 7 milligrams per square centimeter of absorber.[1]

(9) Ionizing radiation measuring instruments containing, for purposes of internal calibration or standardization, one or more sources of byproduct material: *Provided*, That;

(i) Each source contains no more than one exempt quantity set forth in § 30.71, Schedule B, and

(ii) Each instrument contains no more than 10 exempt quantities. For purposes of this paragraph (a)(9), an instrument's source(s) may contain either one type or different types of radionuclides and an individual exempt quantity may be composed of fractional parts of one or more of the exempt quantities in § 30.71, Schedule B, provided that the sum of such fractions shall not exceed unity.

(iii) For purposes of this paragraph (a)(9), 0.05 microcurie of americium-241 is considered an exempt quantity under § 30.71, Schedule B.

(10) Spark gap irradiators containing not more than 1 microcurie of cobalt-60 per spark gap irradiator for use in electrically ignited fuel oil burners having a firing rate of at least 3 gallons per hour (11.4 liters per hour).

(b) Any person who desires to apply byproduct material to, or to incorporate byproduct material into, the products exempted in paragraph (a) of this section, or who desires to initially transfer for sale or distribution such products containing byproduct material, should apply for a specific license pursuant to § 32.14 of this chapter, which license states that the product may be distributed by the licensee to persons exempt from the regulations pursuant to paragraph (a) of this section.

[31 FR 5316, Apr. 2, 1966, as amended at 31 FR 14349, Nov. 8, 1966; 32 FR 785, Jan. 24, 1967; 32 FR 6434, Apr. 26, 1967; 32 FR 13921, Oct. 6, 1967; 34 FR 6651, Apr. 18, 1969; 34 FR 19546, Dec. 11, 1969; 35 FR 6427, Apr. 22, 1970; 35 FR 8820, June 6, 1970; 43 FR 2387, Jan. 17, 1978; 43 FR 6921, Feb. 17, 1978; 46 FR 26471, May 13, 1981; 46 FR 46876, Sept. 23, 1981; 52 FR 8241, Mar. 17, 1987]

§ 30.16 Resins containing scandium-46 and designed for sand-consolidation in oil wells.

Any person is exempt from the requirements for a license set forth in section 81 of the Act and from the regulations in Parts 20 and 30 through 35 and 39 of this chapter to the extent that such person receives, possesses, uses, transfers, owns, or acquires synthetic plastic resins containing scandium-46 which are designed for sand-consolidation in oil wells, and which have been manufactured or initially transferred for sale or distribution, in accordance with a specific license issued pursuant to § 32.17 of this chapter or equivalent regulations of an agreement State. The exemption in this section does not authorize the manufacture or initial transfer for sale or distribution of any resins containing scandium-46.

[32 FR 4241, Mar. 18, 1967, as amended at 43 FR 6921, Feb. 17, 1978; 52 FR 8241, Mar. 17, 1987]

§ 30.18 Exempt quantities.

(a) Except as provided in paragraphs (c) and (d) of this section, any person is exempt from the requirements for a license set forth in section 81 of the Act and from the regulations in Parts 30 through 34 and 39 of this chapter to the extent that such person receives, possesses, uses, transfers, owns, or acquires byproduct material in individual quantities each of which does not exceed the applicable quantity set forth in § 30.71, Schedule B.

(b) Any person who possesses byproduct material received or acquired prior to September 25, 1971 under the general license then provided in § 31.4 of this chapter is exempt from the requirements for a license set forth in section 81 of the Act and from the regulations in Parts 30 through 34 of this chapter to the extent that such person possesses, uses, transfers, or owns such byproduct material.

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[1] For purposes of this paragraph "electron tubes" include spark gap tubes, power tubes, gas tubes including glow lamps, receiving tubes, microwave tubes, indicator tubes, pickup tubes, radiation detection tubes, and any other completely sealed tube that is designed to conduct or control electrical currents.

(c) This section does not authorize for purposes of commercial distribution the production, packaging, repackaging, or transfer of byproduct material or the incorporation of byproduct material into products intended for commercial distribution.

(d) No person may, for purposes of commercial distribution, transfer byproduct material in the individual quantities set forth in § 30.71 Schedule B, knowing or having reason to believe that such quantities of byproduct material will be transferred to persons exempt under this section or equivalent regulations of an Agreement State, except in accordance with a license issued under § 32.18 of this chapter, which license states that the byproduct material may be transferred by the licensee to persons exempt under this section or the equivalent regulations of an Agreement State.

[35 FR 6427, Apr. 22, 1970, as amended at 36 FR 16898, Aug. 26, 1971; 43 FR 6921, Feb. 17, 1978; 52 FR 8241, Mar. 17, 1987]

§ 30.19 Self-luminous products containing tritium, krypton-85, or promethium-147.

(a) Except for persons who manufacture, process, produce, or initially transfer for sale or distribution self-luminous products containing tritium, krypton-85, or promethium-147, and except as provided in paragraph (c) of this section, any person is exempt from the requirements for a license set forth in section 81 of the Act and from the regulations in Parts 20 and 30 through 35 and 39 of this chapter to the extent that such person receives, possesses, uses, transfers, owns, or acquires tritium, krypton-85, or promethium-147 in self-luminous products manufactured, processed, produced, or initially transferred in accordance with a specific license issued pursuant to § 32.22 of this chapter, which license authorizes the initial transfer of the product for use under this section.

(b) Any person who desires to manufacture, process, or produce self-luminous products containing tritium, krypton-85, or promethium-147, or to transfer such products for use pursuant to paragraph (a) of this section, should apply for a license pursuant to § 32.22 of this chapter, which license states that the product may be transferred by the licensee to persons exempt from the regulations pursuant to paragraph (a) of this section or equivalent regulations of an Agreement State.

(c) The exemption in paragraph (a) of this section does not apply to tritium, krypton-85, or promethium-147 used in products primarily for frivolous purposes or in toys or adornments.

[34 FR 9026, June 6, 1969, as amended at 40 FR 8785, Mar. 3, 1975; 43 FR 6921, Feb. 17, 1978; 52 FR 8241, Mar. 17, 1987]

§ 30.20 Gas and aerosol detectors containing byproduct material.

(a) Except for persons who manufacture, process, produce, or initially transfer for sale or distribution gas and aerosol detectors containing byproduct material, any person is exempt from the requirements for a license set forth in section 81 of the Act and from the regulations in Parts 20 and 30 through 35 and 39 of this chapter to the extent that such person receives, possesses, uses, transfers, owns, or acquires byproduct material, in gas and aerosol detectors designed to protect life or property from fires and airborne hazards, and manufactured, processed, produced, or initially transferred in accordance with a specific license issued pursuant to § 32.26 of this chapter, which license authorizes the initial transfer of the product for use under this section.

(b) Any person who desires to manufacture, process, or produce gas and aerosol detectors containing byproduct material, or to initially transfer such products for use pursuant to paragraph (a) of this section, should apply for a license pursuant to § 32.26 of this chapter, which license states that the product may be initially transferred by the licensee to persons exempt from the regulations pursuant to paragraph (a) of this section or equivalent regulations of an Agreement State.

[34 FR 6653, Apr. 18, 1969, as amended at 40 FR 8785, Mar. 3, 1975; 43 FR 6921, Feb. 17, 1978; 52 FR 8241, Mar. 17, 1987]

LICENSES

§ 30.31 Types of licenses.

Licenses for byproduct material are of two types: General and specific. Specific licenses are issued to named persons upon applications filed pursuant to the regulations in this part and Parts 32 through 35 and 39 of this chapter. General licenses are effective without the filing of applications with the Commission or the issuance of licensing documents to particular persons.

[30 FR 8185, June 26, 1965, as amended at 43 FR 6922, Feb. 17, 1978; 52 FR 8241, Mar. 17, 1987]

§ 30.32 Application for specific licenses.

(a) A person may file an application in duplicate on NRC Form 313, "Application for Material License," in accordance with the instructions in § 30.6 of this chapter. Information contained in previous applications, statements or reports filed with the Commission or the Atomic Energy Commission may be incorporated by reference, provided that the reference is clear and specific.

(b) The Commission may at any time after the filing of the original application, and before the expiration of the license, require further statements in order to enable the Commission to determine whether the application should be granted or denied or whether a license should be modified or revoked.

(c) Each application shall be signed by the applicant or licensee or a person duly authorized to act for and on his behalf.

(d) An application for license filed pursuant to the regulations in this part and Parts 32 through 35 of this chapter will be considered also as an application for licenses authorizing other activities for which licenses are required by the Act, provided that the application specifies the additional activities for which licenses are requested and complies with regulations of the Commission as to applications for such licenses.

(e) Each application for a byproduct material license, other than a license exempted from Part 170 of this chapter, shall be accompanied by the fee prescribed in § 170.31 of this chapter. No fee will be required to accompany an application for renewal or amendment of a license, except as provided in § 170.31 of this chapter.

(f) An application for a license to receive and possess byproduct material for the conduct of any activity which the Commission has determined pursuant to Subpart A of Part 51 of this chapter will significantly affect the quality of the environment shall be filed at least 9 months prior to commencement of construction of the plant or facility in which the activity will be conducted and shall be accompanied by any Environmental Report required pursuant to Subpart A of Part 51 of this chapter.

(g) An application for a specific license to use byproduct material in the form of a sealed source or in a device that contains the sealed source must either—

(1) Identify the source or device by manufacturer and model number as registered with the Commission under § 32.210 of this chapter or with an Agreement State; or

(2) Contain the information identified in § 32.210(c).

(h) As provided by § 30.35, certain applications for specific licenses filed under this part and Parts 32 through 35 of this chapter must contain a proposed decommissioning funding plan or a certification of financial assurance for decommissioning. In the case of renewal applications submitted before July 27, 1990, this submittal may follow the renewal application but must be submitted on or before July 27, 1990.

(i)(1) Each application to possess radioactive materials in unsealed form, on foils or plated sources, or sealed in glass in excess of the quantities in § 30.72, "Schedule C—Quantities of Radioactive Materials Requiring Consideration of the Need for an Emergency Plan for Responding to a Release," must contain either:

(i) An evaluation showing that the maximum dose to a person offsite due to a release of radioactive materials would not exceed 1 rem effective dose equivalent or 5 rems to the thyroid; or

(ii) An emergency plan for responding to a release of radioactive material.

(2) One or more of the following factors may be used to support an evaluation submitted under paragraph (i)(1)(i) of this section:

(i) The radioactive material is physically separated so that only a portion could be involved in an accident;

(ii) All or part of the radioactive material is not subject to release during an accident because of the way it is stored or packaged;

(iii) The release fraction in the respirable size range would be lower than the release fraction shown § 30.72 due to the chemical or physical form of the material;

(iv) The solubility of the radioactive material would reduce the dose received;

(v) Facility design or engineered safety features in the facility would cause the release fraction to be lower than shown in § 30.72;

(vi) Operating restrictions or procedures would prevent a release fraction as large as that shown in § 30.72; or

(vii) Other factors appropriate for the specific facility.

(3) An emergency plan for responding to a release of radioactive material submitted under paragraph (i)(1)(ii) of this section must include the following information:

(i) Facility description. A brief description of the licensee's facility and area near the site.

(ii) Types of accidents. An identification of each type of radio-active materials accident for which protective actions may be needed.

(iii) Classification of accidents. A classification system for classifying accidents as alerts or site area emergencies.

(iv) Detection of accidents. Identification of the means of detecting each type of accident in a timely manner.

(v) Mitigation of consequences. A brief description of the means and equipment for mitigating the consequences of each type of acident, including those provided to protect workers onsite, and a description of the program for maintaining the equipment.

(vi) Assessment of releases. A brief description of the methods and equipment to assess releases of radioactive materials.

(vii) Responsibilities. A brief description of the responsibilities of licensee personnel should an accident occur, including identification of personnel responsible for promptly notifying offsite response organizations and the NRC; also responsibilities for developing, maintaining, and updating the plan.

(viii) Notification and coordination. A commitment to and a brief description of the means to promptly notify offsite response organizations and request offsite assistance, including medical assistance for the treatment of contaminated injured onsite workers when appropriate. A control point must be established. The notification and coordination must be planned so that unavailability of some personnel, parts of the facility, and some equipment will not prevent the notification and coordination. The licensee shall also commit to notify the NRC operations center immediately after notification of the appropriate offsite response organizations and not later than one hour after the licensee declares an emergency.[1]

(ix) Information to be communicated. A brief description of the types of information on facility status, radioactive releases, and recommended protective actions, if necessary, to be given to offsite response organizations and to the NRC.

(x) Training. A brief description of the frequency, performance objectives and plans for the training that the licensee will provide workers on how to respond to an emergency including any special instructions and orientation tours the licensee would offer to fire, police, medical and other emergency personnel. The training shall familiarize personnel with site-specific emergency procedures. Also, the training shall thoroughly prepare site personnel for their responsibilities in the event of accident scenarios postulated as most probable for the specific site, including the use of team training for such scenarios.

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[1] These reporting requirements do not superceed or release licensees of complying with the requirements under the Emergency Planning and Community Right-to-Know Act of 1986, Title III, Pub. L. 99-499 or other state or federal reporting requirements.

(xi) Safe shutdown. A brief description of the means of restoring the facility to a safe condition after an accident.

(xii) Exercises. Provisions for conducting quarterly communications checks with offsite response organizations and biennial onsite exercises to test response to simulated emergencies. Quarterly communications checks with offsite response organizations must include the check and update of all necessary telephone numbers. The licensee shall invite offsite response organizations to participate in the biennial exercises. Participation of offsite response organizations in biennial exercises although recommended is not required. Exercises must use accident scenarios postulated as most probable for the specific site and the scenarios shall not be known to most exercise participants. The licensee shall critique each exercise using individuals not having direct implementation responsibility for the plan. Critiques of exercises must evaluate the appropriateness of the plan, emergency procedures, facilities, equipment, training of personnel, and overall effectiveness of the response. Deficiencies found by the critiques must be corrected.

(xiii) Hazardous chemicals. A certification that the applicant has met its responsibilities under the Emergency Planning and Community Right-to-Know Act of 1986, Title III, Pub. L. 99-499, if applicable to the applicant's activities at the proposed place of use of the byproduct material.

(4) The licensee shall allow the offsite response organizations expected to respond in case of an accident 60 days to comment on the licensee's emergency plan before submitting it to NRC. The licensee shall provide any comments received within the 60 days to the NRC with the emergency plan.

[30 FR 8185, June 26, 1965, as amended at 36 FR 145, Jan. 6, 1971; 37 FR 5747, Mar. 21, 1972; 43 FR 6922, Feb. 17, 1978; 49 FR 9403, Mar. 12, 1984; 49 FR 27924, July 9, 1984; 52 FR 27786, July 24, 1987; 53 FR 24044, June 27, 1988; 54 FR 14060, Apr. 7, 1989]

§ 30.33 General requirements for issuance of specific licenses.

(a) An application for a specific license will be approved if:

(1) The application is for a purpose authorized by the Act;

(2) The applicant's proposed equipment and facilities are adequate to protect health and minimize danger to life or property;

(3) The applicant is qualified by training and experience to use the material for the purpose requested in such manner as to protect health and minimize danger to life or property;

(4) The applicant satisfies any special requirements contained in Parts 32 through 35 and 39; and

(5) In the case of an application for a license to receive and possess byproduct material for the conduct of any activity which the Commission determines will significantly affect the quality of the environment, the Director of Nuclear Material Safety and Safeguards or his designee, before commencement of construction of the plant or facility in which the activity will be conducted, on the basis of information filed and evaluations made pursuant to Subpart A of Part 51 of this chapter, has concluded, after weighing the environmental, economic, technical, and other benefits against environmental costs and considering available alternatives, that the action called for is the issuance of the proposed license, with any appropriate conditions to protect environmental values. Commencement of construction prior to such conclusion shall be grounds for denial of a license to receive and possess byproduct material in such plant or facility. As used in this paragraph the term "commencement of construction" means any clearing of land, excavation, or other substantial action that would adversely affect the environment of a site. The term does not mean site exploration, necessary roads for site exploration, borings to determine foundation conditions, or other preconstruction monitoring or testing to establish background information related to the

suitability of the site or the protection of environmental values.

(b) Upon a determination that an application meets the requirements of the Act, and the regulations of the Commission, the Commission will issue a specific license authorizing the possession and use of byproduct material (Form NRC 374, "Byproduct Material License").

[30 FR 8185, June 26, 1965, as amended at 36 FR 12731, July 7, 1971; 37 FR 5747, Mar. 21, 1972; 39 FR 26279, July 18, 1974; 43 FR 6922, Feb. 17, 1978; 49 FR 9403, Mar. 12, 1984; 52 FR 8241, Mar. 17, 1987]

§ 30.34 Terms and conditions of licenses.

(a) Each license issued pursuant to the regulations in this part and the regulations in Parts 31 through 35 and 39 of this chapter shall be subject to all the provisions of the Act, now or hereafter in effect, and to all valid rules, regulations and orders of the Commission.

(b) No license issued or granted pursuant to the regulations in this part and Parts 31 through 35, and 39 nor any right under a license shall be transferred, assigned or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of any license to any person, unless the Commission shall, after securing full information, find that the transfer is in accordance with the provisions of the Act and shall give its consent in writing.

(c) Each person licensed by the Commission pursuant to the regulations in this part and Parts 31 through 35 and 39 shall confine his possession and use of the byproduct material to the locations and purposes authorized in the license. Except as otherwise provided in the license, a license issued pursuant to the regulations in this part and Parts 31 through 35 and 39 of this chapter shall carry with it the right to receive, acquire, own, and possess byproduct material. Preparation for shipment and transport of byproduct material shall be in accordance with the provisions of Part 71 of this chapter.

(d) Each license issued pursuant to the regulations in this part and Parts 31 through 35 and 39 shall be deemed to contain the provisions set forth in section 183b.-d., inclusive, of the Act, whether or not these provisions are expressly set forth in the license.

(e) The Commission may incorporate, in any license issued pursuant to the regulations in this part and Parts 31 through 35 and 39, at the time of issuance, or thereafter by appropriate rule, regulation or order, such additional requirements and conditions with respect to the licensee's receipt, possession, use and transfer of byproduct material as it deems appropriate or necessary in order to:

(1) Promote the common defense and security;

(2) Protect health or to minimize danger to life or property;

(3) Protect restricted data;

(4) Require such reports and the keeping of such records, and to provide for such inspections of activities under the license as may be necessary or appropriate to effectuate the purposes of the Act and regulations thereunder.

(f) Licensees required to submit emergency plans by § 30.32(i) shall follow the emergency plan approved by the Commission. The licensee may change the approved without Commission approval only if the changes do not decrease the effectiveness of the plan. The licensee shall furnish the change to the appropriate NRC Regional Office specified in § 30.6 and to affected offsite response organizations within six months after the change is made. Proposed changes that decrease, or potentially decrease, the effectiveness of the approved emergency plan may not be implemented without prior application to and prior approval by the Commission.

(g) Each licensee preparing technetium-99m radiopharmaceuticals from molybdenum-99/technetium-99m generators shall test the generator eluates for molybdenum-99 breakthrough in accordance with § 35.204 of this chapter. The licensee shall record the results of each test and retain each record for three years after the record is made.

(h)(1) Each licensee shall notify the appropriate NRC Regional Administrator, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any Chapter of Title 11 (Bankruptcy) of the United States Code by or against:

(i) The licensee;

(ii) An entity (as that term is defined in 11 U.S.C. 101(14)) controlling the licensee or listing the license or licensee as property of the estate; or

(iii) An affiliate (as that term is defined in 11 U.S.C. 101(2)) of the licensee.

(2) This notification must indicate:

(i) The bankruptcy court in which the petition for bankruptcy was filed; and

(ii) The date of the filing of the petition.

(i)(1) From August 23, 1990, to August 23, 1993, each licensee eluting generators and processing radioactive material with diagnostic reagent kits for which the Food and Drug Administration (FDA) has approved a "New Drug Application" (NDA) may depart from the manufacturer's elution and preparation instructions (for radiopharmaceuticals authorized for use pursuant to § 35.200) provided that:

(i) The licensee has a written directive made by an authorized user physician that directs a specific departure for a particular patient, or patients, or for a radiopharmaceutical, and which includes the specific nature of the departure, a precise description of the departure, and a brief statement of the reasons why the departure from the manufacturer's instructions for preparing the radiopharmaceutical would obtain medical results not otherwise attainable or would reduce medical risks to particular patients because of their medical condition. The licensee shall keep the written directive and record of the number of prescriptions dispensed under the departure in an auditable form and available for inspection for 5 years; or

(ii) An authorized user physician determines, in accordance with § 35.200(c), that a delay in preparing the radiopharmaceutical in order to make a written directive would jeopardize the patient's health because of the emergent nature of the patient's medical condition. In this case, the licensee shall obtain the written directive made by the authorized user physician which contains the notation regarding the emergency and all the information specified in paragraph (i)(1)(i) of this section within 3 working days after the prescribed departure. The licensee shall keep these records in an auditable form and available for inspection for 5 years.

(2) The actions authorized in paragraph (i)(1) of this section are permitted notwithstanding more restrictive language in license conditions unless those license conditions specifically reference § 30.34(i).

(3) Nothing in this section relieves the licensee from complying with other applicable NRC, FDA, and other Federal or State regulations governing the elution of generators and preparation of reagent kits.

[30 FR 8185, June 26, 1965, as amended at 38 FR 33969, Dec. 10, 1973; 43 FR 6922, Feb. 17, 1978; 48 FR 32328, July 15, 1983; 52 FR 1295, Jan. 12, 1987; 52 FR 8241, Mar. 17, 1987; 53 FR 19245, May 27, 1988; 53 FR 23383, June 22, 1988; 54 FR 14061, Apr. 7, 1989; 55 FR 34517, Aug. 23, 1990]

EFFECTIVE DATE NOTE: At 55 FR 34517, Aug. 23, 1990, § 34.30 was amended by adding paragraph (i), effective from August 23, 1990 to August 23, 1993.

§ 30.35 Financial assurance and recordkeeping for decommissioning.

(a) Each applicant for a specific license authorizing the possession and use of unsealed byproduct material of half-life greater than 120 days and in quantities exceeding 10^5 times the applicable quantities set forth in Appendix C to 10 CFR Part 20 shall submit a decommissioning funding plan as described in paragraph (e) of this section. The decommissioning funding plan must also be submitted when a combination of isotopes is involved if R divided by 10^5 is greater than 1 (unity rule), where R is defined here as the sum of the ratios of the quantity of each isotope to the applicable value in Appendix C.

(b) Each applicant for a specific license authorizing possession and use of byproduct material of half-life greater than 120 days and in quantities specified in paragraph (d) of this section shall either—

(1) Submit a decommissioning funding plan as described in paragraph (e) of this section; or

(2) Submit a certification that financial assurance for decommissioning has been provided in the amount prescribed by paragraph (d) of this section using one of the methods described in paragraph (f) of this section. For an applicant, this certification may state that the appropriate assurance will be obtained after the application has been approved and the license issued but prior to the receipt of licensed material. As part of the certification, a copy of the financial instrument obtained to satisfy the requirements of paragraph (f) of this section is to be submitted to NRC.

(c) (1) Each holder of a specific license issued on or after July 27, 1990, which is of a type described in paragraph (a) or (b) of this section, shall provide financial assurance for decommissioning in accordance with the criteria set forth in this section.

(2) Each holder of a specific license issued before July 27, 1990, and of a type described in paragraph (a) of this section shall submit, on or before July 27, 1990, a decommissioning funding plan or a certification of financial assurance for decommissioning in an amount at least equal to $750,000 in accordance with the criteria set forth in this section. If the licensee submits the certification of financial assurance rather than a decommissioning funding plan at this time, the licensee shall include a decommissioning funding plan in any application for license renewal.

(3) Each holder of a specific license issued before July 27, 1990, and of a type described in paragraph (b) of this section shall submit, on or before July 27, 1990, a certification of financial assurance for decommissioning or a decommissioning funding plan in accordance with the criteria set forth in this section.

(d) Table of required amounts of financial assurance for decommissioning by quantity of material.

greater than 10^4 but less than or equal to 10^5 times the applicable quantities of Appendix C of Part 20 in unsealed form. (For a combination of isotopes, if R, as defined in § 30.35(a), divided by 10^4 is greater than 1 but R divided by 10^5 is less than or equal to 1.)	$750,000
greater than 10^3 but less than or equal to 10^4 times the applicable quantities of Appendix C of Part 20 in unsealed form. (For a combination of isotopes, if R, as defined in § 30.35(a), divided by 10^3 is greater than 1 but R divided by 10^4 is less than or equal to 1.)	$150,000
greater than 10^{10} times the applicable quantities of Appendix C of Part 20 in sealed sources or plated foils. (For a combination of isotopes, if R, as defined in § 30.35(a), divided by 10^{10} is greater than 1)	$75,000

(e) Each decommissioning funding plan must contain a cost estimate for decommissioning and a description of the method of assuring funds for decommissioning from paragraph (f) of this section, including means of adjusting cost estimates and associated funding levels periodically over the life of the facility.

(f) Financial assurance for decommissioning must be provided by one or more of the following methods.

(1) Prepayment. Prepayment is the deposit prior to the start of operation into an account segregated from licensee assets and outside the licensee's administrative control of cash or liquid assets such that the amount of funds would be sufficient to pay decommissioning costs. Prepayment may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities.

(2) A surety method, insurance, or other guarantee method. These methods guarantee that decommissioning costs will be paid should the licensee default. A surety method may be in the form of a surety bond, letter of credit, or line of credit. A parent company guarantee of funds for decommissioning costs based on a financial

test may be used if the guarantee and test are as contained in Appendix A to this part. A parent company guarantee may not be used in combination with other financial methods to satisfy the requirements of this section. Any surety method or insurance used to provide financial assurance for decommissioning must contain the following conditions:

(i) The surety method or insurance must be open-ended or, if written for a specified term, such as five years, must be renewed automatically unless 90 days or more prior to the renewal date, the issuer notifies the Commission, the beneficiary, and the licensee of its intention not to renew. The surety method or insurance must also provide that the full face amount be paid to the beneficiary automatically prior to the expiration without proof of forfeiture if the licensee fails to provide a replacement acceptable to the Commission within 30 days after receipt of notification of cancellation.

(ii) The surety method or insurance must be payable to a trust established for decommissioning costs. The trustee and trust must be acceptable to the Commission. An acceptable trustee includes an appropriate State or Federal government agency or an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

(iii) The surety method or insurance must remain in effect until the Commission has terminated the license.

(3) An external sinking fund in which deposits are made at least annually, coupled with a surety method or insurance, the value of which may decrease by the amount being accumulated in the sinking fund. An external sinking fund is a fund established and maintained by setting aside funds periodically in an account segregated from licensee assets and outside the licensee's administrative control in which the total amount of funds would be sufficient to pay decommissioning costs at the time termination of operation is expected. An external sinking fund may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities. The surety or insurance provisions must be as stated i
paragraph (f)(2) of this section.

(4) In the case of Federal, State, o
local government licensees, a state
ment of intent containing a cost esti
mate for decommissioning or a
amount based on the Table in para
graph (d) of this section, and indicat
ing that funds for decommissionin
will be obtained when necessary.

(g) Each person licensed under thi
part or Parts 32 through 35 of thi
chapter shall keep records of informa
tion important to the safe and effe
tive decommissioning of the facility i
an indentified location until the l
cense is terminated by the Commi
sion. If records of relevant informa
tion are kept for other purposes, refe
ence to these records and their loc
tions may be used. Information th
Commission considers important to d
commissioning consists of—

(1) Records of spills or other unus
al occurrences involving the spread o
contamination in and around the faci
ity, equipment, or site. These record
may be limited to instances when co
tamination remains after any cleanu
procedures or when there is reason
ble likelihood that contaminants ma
have spread to inaccessible areas as i
the case of possible seepage int
porous materials such as concret
These records must include any know
information on identification of i
volved nuclides, quantities, forms, an
concentrations.

(2) As-built drawings and modific
tions of structures and equipment i
restricted areas where radioactive m
terials are used and/or stored, and o
locations of possible inaccessible co
tamination such as buried pipes whic
may be subject to contamination.
required drawings are referenced, eac
relevant document need not be i
dexed individually. If drawings are n
available, the licensee shall substitu
appropriate records of available info
mation concerning these areas and l
cations.

(3) Records of the cost estimate pe
formed for the decommissioning fun
ing plan or of the amount certified f
decommissioning, and records of th
funding method used for assurin
funds if either a funding plan or cert
fication is used.

[53 FR 24044, June 27, 1988]

§ 30.36 Expiration and termination of licenses.

(a) Except as provided in § 30.37(b) and paragraph (e) of this section, each specific license expires at the end of the day, in the month and year stated in the license.

(b) Each licensee shall notify the Commission promptly, in writing under § 30.6, and request termination of the license when the licensee decides to terminate all activities involving materials authorized under the license. This notification and request for termination of the license must include the reports and information specified in paragraphs (c)(1) (iv) and (v) of this section and a plan for completion of decommissioning if required by paragraph (c)(2) of this section or by license condition.

(c)(1) If a licensee does not submit an application for license renewal under § 30.37, the licensee shall on or before the expiration date specified in the license—

(i) Terminate use of byproduct material;

(ii) Remove radioactive contamination to the extent practicable except for those procedures covered by paragraph (c)(2)(i) of this section;

(iii) Properly dispose of byproduct material;

(iv) Submit a completed form NRC-314, which certifies information concerning the disposition of materials; and

(v) Conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey, unless the licensee demonstrates that the premises are suitable for release for unrestricted use in some other manner. The licensee shall, as appropriate—

(A) Report levels of radiation in units of microrads per hour of beta and gamma radiation at one centimeter and gamma radiation at one meter from surfaces, and report levels of radioactivity, including alpha, in units of disintegrations per minute (or microcuries) per 100 square centimeters removable and fixed for surfaces, microcuries per milliliter for water, and picocuries per gram for solids such as soils or concrete; and

(B) Specify the survey instrument(s) used and certify that each instrument is properly calibrated and tested.

(2)(i) In addition to the information required under paragraphs (c)(1)(iv) and (v) of this section, the licensee shall submit a plan for completion of decommissioning if the procedures necessary to carry out decommissioning have not been previously approved by the NRC and could increase potential health and safety impacts to workers or to the public such as in any of the following cases:

(A) Procedures would involve techniques not applied routinely during cleanup or maintenance operations; or

(B) Workers would be entering areas not normally occupied where surface contamination and radiation levels are significantly higher than routinely encountered during operation; or

(C) Procedures could result in significantly greater airborne concentrations of radioactive materials than are present during operation; or

(D) Procedures could result in significantly greater releases of radioactive material to the environment than those associated with operation.

(ii) Procedures with potential health and safety impacts may not be carried out prior to approval of the decommissioning plan.

(iii) The proposed decommissioning plan, if required by paragraph (c)(2)(i) of this section or by license condition, must include—

(A) Description of planned decommissioning activities;

(B) Description of methods used to assure protection of workers and the environment against radiation hazards during decommissioning;

(C) A description of the planned final radiation survey; and

(D) An updated detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and plan for assuring the availability of adequate funds for completion of decommissioning.

(iv) The proposed decommissioning plan will be approved by the Commission if the information therein demonstrates that the decommissioning will be completed as soon as is reasonable and that the health and safety of workers and the public will be adequately protected.

(3) Upon approval of the decommissioning plan by the Commission, the licensee shall complete decommissioning in accordance with the approved plan. As a final step in decommissioning, the licensee shall again submit the information required in paragraph (c)(1)(v) of this section and shall certify the disposition of accumulated wastes from decommissioning.

(d) If the information submitted under paragraph (c)(1)(v) or (c)(3) of this section does not adequately demonstrate that the premises are suitable for release for unrestricted use, the Commission will inform the licensee of the appropriate further actions required for termination of license.

(e) Each specific license continues in effect, beyond the expiration date if necessary, with respect to possession of residual byproduct material present as contamination until the Commission notifies the licensee in writing that the license is terminated. During this time, the licensee shall—

(1) Limit actions involving byproduct material to those related to decommissioning; and

(2) Continue to control entry to restricted areas until they are suitable for release for unrestricted use and the Commission notifies the licensee in writing that the license is terminated.

(f) Specific licenses will be terminated by written notice to the licensee when the Commission determines that—

(1) Byproduct material has been properly disposed;

(2) Reasonable effort has been made to eliminate residual radioactive contamination, if present; and

(3)(i) A radiation survey has been performed which demonstrates that the premises are suitable for release for unrestricted use; or

(ii) Other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release for unrestricted use.

[53 FR 24045, June 27, 1988]

§ 30.37 Application for renewal of licenses.

(a) Application for renewal of a specific license shall be filed on Form NRC-313 in accordance with § 30.32.

(b) In any case in which a licensee, not less than thirty (30) days prior to the expiration of his existing license, has filed an application in proper form for renewal or for a new license, such existing license shall not expire until the application has been finally determined by the Commission.

[30 FR 8185, June 26, 1965, as amended at 49 FR 19625, May 9, 1984; 49 FR 21699, May 23, 1984]

§ 30.38 Application for amendment of licenses.

Applications for amendment of a license shall be filed on Form NRC-313 in accordance with § 30.32 and shall specify the respects in which the licensee desires its license to be amended and the grounds for the amendment.

[49 FR 19625, May 9, 1984]

§ 30.39 Commission action on applications to renew or amend.

In considering an application by a licensee to renew or amend his license the Commission will apply the applicable criteria set forth in § 30.33 and Parts 32 through 35 and 39 of this chapter.

[30 FR 8185, June 26, 1965, as amended at 43 FR 6922, Feb. 17, 1978; 52 FR 8241, Mar. 17, 1987]

§ 30.41 Transfer of byproduct material.

(a) No licensee shall transfer byproduct material except as authorized pursuant to this section.

(b) Except as otherwise provided in his license and subject to the provisions of paragraphs (c) and (d) of this section, any licensee may transfer byproduct material:

(1) To the Department;

(2) To the agency in any Agreement State which regulates radioactive material pursuant to an agreement under section 274 of the Act;

(3) To any person exempt from the licensing requirements of the Act and

regulations in this part, to the extent permitted under such exemption;

(4) To any person in an Agreement State, subject to the jurisdiction of that State, who has been exempted from the licensing requirements and regulations of that State, to the extent permitted under such exemption;

(5) To any person authorized to receive such byproduct material under terms of a specific license or a general license or their equivalents issued by the Atomic Energy Commission, the Commission, or an Agreement State;

(6) To a person abroad pursuant to an export license issued under Part 110 of this chapter; or

(7) As otherwise authorized by the Commission in writing.

(c) Before transferring byproduct material to a specific licensee of the Commission or an Agreement State or to a general licensee who is required to register with the Commission or with an Agreement State prior to receipt of the byproduct material, the licensee transferring the material shall verify that the transferee's license authorizes the receipt of the type, form, and quantity of byproduct material to be transferred.

(d) The following methods for the verification required by paragraph (c) of this section are acceptable:

(1) The transferor may have in his possession, and read, a current copy of the transferee's specific license or registration certificate;

(2) The transferor may have in his possession a written certification by the transferee that he is authorized by license or registration certificate to receive the type, form, and quantity of byproduct material to be transferred, specifying the license or registration certificate number, issuing agency and expiration date;

(3) For emergency shipments the transferor may accept oral certification by the transferee that he is authorized by license or registration certificate to receive the type, form, and quantity of byproduct material to be transferred, specifying the license or registration certificate number, issuing agency and expiration date: *Provided*, That the oral certification is confirmed in writing within 10 days;

(4) The transferor may obtain other sources of information compiled by a reporting service from official records of the Commission or the licensing agency of an Agreement State as to the identity of licensees and the scope and expiration dates of licenses and registration; or

(5) When none of the methods of verification described in paragraphs (d)(1) to (4) of this section are readily available or when a transferor desires to verify that information received by one of such methods is correct or up-to-date, the transferor may obtain and record confirmation from the Commission or the licensing agency of an Agreement State that the transferee is licensed to receive the byproduct material.

[38 FR 33969, Dec. 10, 1973, as amended at 40 FR 8785, Mar. 3, 1975; 43 FR 6922, Feb. 17, 1978]

RECORDS, INSPECTIONS, TESTS, AND REPORTS

§ 30.51 Records.

(a) Each person who receives byproduct material pursuant to a license issued pursuant to the regulations in this part and Parts 31 through 35 of this chapter shall keep records showing the receipt, transfer, and disposal of the byproduct material as follows:

(1) The licensee shall retain each record of receipt of byproduct material as long as the material is possessed and for three years following transfer or disposal of the material.

(2) The licensee who transferred the material shall retain each record of transfer for three years after each transfer unless a specific requirement in another part of the regulations in this chapter dictates otherwise.

(3) The licensee who disposed of the material shall retain each record of disposal of byproduct material until the Commission terminates each license that authorizes disposal of the material.

(b) The licensee shall retain each record that is required by the regulations in this part and Parts 31 through 35 of this chapter or by license condition for the period specified by the appropriate regulation or license condition. If a retention period is not otherwise specified by regulation or license condition, the record must be retained until the Commission terminates each license that authorizes the activity that is subject to the recordkeeping requirement.

(c)(1) Records which must be maintained pursuant to this part and Parts 31 through 35 of this chapter may be the original or a reproduced copy or microform if such reproduced copy or microform is duly authenticated by authorized personnel and the microform is capable of producing a clear and legible copy after storage for the period specified by Commission regulations. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records such as letters, drawings, specifications, must include all pertinent information such as stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.

(2) If there is a conflict between the Commission's regulations in this part and Parts 31 through 35 and 39 of this chapter, license condition, or other written Commission approval or authorization pertaining to the retention period for the same type of record, the retention period specified in the regulations in this part and Parts 31 through 35 and 39 of this chapter for such records shall apply unless the Commission, pursuant to § 30.11, has granted a specific exemption from the record retention requirements specified in the regulations in this part or Parts 31 through 35 and 39 of this chapter.

[41 FR 18301, May 5, 1976, as amended at 43 FR 6922, Feb. 17, 1978; 52 FR 8241, Mar. 17, 1987; 53 FR 19245, May 27, 1988]

§ 30.52 Inspections.

(a) Each licensee shall afford to the Commission at all reasonable times opportunity to inspect byproduct material and the premises and facilities wherein byproduct material is used or stored.

(b) Each licensee shall make available to the Commission for inspection, upon reasonable notice, records kept by him pursuant to the regulations in this chapter.

[30 FR 8185, June 26, 1965]

§ 30.53 Tests.

Each licensee shall perform, or permit the Commission to perform, such tests as the Commission deems appropriate or necessary for the administration of the regulations in this part and Parts 31 through 35 and 39 of this chapter, including tests of:

(a) Byproduct material;

(b) Facilities wherein byproduct material is utilized or stored;

(c) Radiation detection and monitoring instruments; and

(d) Other equipment and devices used in connection with the utilization or storage of byproduct material.

[30 FR 8185, June 26, 1965, as amended by 43 FR 6922, Feb. 17, 1978; 52 FR 8241, Mar. 17, 1987]

§ 30.55 Tritium reports.

(a)-(b) [Reserved]

(c) Except as specified in paragraph (d) of this section, each licensee who is authorized to possess tritium shall report promptly to the appropriate NRC Regional Office listed in Appendix D of Part 20 of this chapter by telephone and telegraph, mailgram, or facsimile any incident in which an attempt has been made or is believed to have been made to commit a theft or unlawful diversion of more than 10 curies of such material at any one time or more than 100 curies of such material in any one calendar year. The initial report shall be followed within a period of fifteen (15) days by a written report submitted to the appropriate NRC Regional Office which sets forth the details of the incident and its consequences. Copies of such written report shall be sent to the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Subsequent to the submission of the written report required by this paragraph, the licensee shall promptly inform the Office of Nuclear Material Safety and Safeguards by means of a written report of any substantive additional information, which becomes available to the licensee, concerning an attempted or apparent theft or unlawful diversion of tritium.

(d) The reports described in this section are not required for tritium possessed pursuant to a general license provided in Part 31 of this chapter or for tritium contained in spent fuel.

[37 FR 9208, May 6, 1972, as amended at 38 FR 1271, Jan. 11, 1973; 38 FR 2330, Jan. 24, 1973; 41 FR 16446, Apr. 19, 1976; 43 FR 6922, Feb. 17, 1978; 46 FR 55085, Nov. 6, 1981; 49 FR 24707, June 15, 1984; 52 FR 31611, Aug. 21, 1987]

ENFORCEMENT

§ 30.61 Modification and revocation of licenses.

(a) The terms and conditions of each license issued pursuant to the regulations in this part and Parts 31 through 35 of this chapter shall be subject to amendment, revision or modification by reason of amendments to the Act, or by reason of rules, regulations and orders issued in accordance with the terms of the Act.

(b) Any license may be revoked, suspended or modified, in whole or in part, for any material false statement in the application or any statement of fact required under section 182 of the Act, or because of conditions revealed by such application or statement of fact or any report, record or inspection or other means which would warrant the Commission to refuse to grant a license on an original application, or for violation of, or failure to observe any of the terms and provisions of the Act or of any rule, regulation or order of the Commission.

(c) Except in cases of willfulness or those in which the public health, interest or safety requires otherwise, no license shall be modified, suspended or revoked unless, prior to the institution of proceedings therefor, facts or conduct which may warrant such action shall have been called to the attention of the licensee in writing and the licensee shall have been accorded an opportunity to demonstrate or achieve compliance with all lawful requirements.

[30 FR 8185, June 26, 1965, as amended at 35 FR 11460, July 17, 1970; 43 FR 6922, Feb. 17, 1978]

§ 30.62 Right to cause the withholding or recall of byproduct material.

The Commission may cause the withholding or recall of byproduct material from any licensee who is not equipped to observe or fails to observe such safety standards to protect health as may be established by the Commission, or who uses such materials in violation of law or regulation of the Commission, or in a manner other than as disclosed in the application therefor or approved by the Commission.

[30 FR 8185, June 26, 1965, as amended at 40 FR 8785, Mar. 3, 1975]

§ 30.63 Violations.

An injunction or other court order may be obtained prohibiting any violation of any provision of the Atomic Energy Act of 1954, as amended, or Title II of the Energy Reorganization Act of 1974, or any regulation or order issued thereunder. A court order may be obtained for the payment of a civil penalty imposed pursuant to section 234 of the Act for violation of section 53, 57, 62, 63, 81, 82, 101, 103, 104, 107, or 109 of the Act, or section 206 of the Energy Reorganization Act of 1974, or any rule, regulation, or order issued thereunder, or any term, condition, or limitation of any license issued thereunder, or for any violation for which a license may be revoked under section 186 of the Act. Any person who willfully violates any provision of the Act or any regulation or order issued thereunder may be guilty of a crime and, upon conviction, may be punished by fine or imprisonment or both, as provided by law.

[40 FR 8785, Mar. 3, 1975]

SCHEDULES

§ 30.70 Schedule A—exempt concentrations.

[See footnotes at end of this table]

Element (atomic number)	Isotope	Col. I	Col. II
		Gas concentration μCi/ml [1]	Liquid and solid concentration μCi/ml [2]
Antimony (51)	Sb 122		3×10^{-4}
	Sb 124		2×10^{-4}
	Sb 125		1×10^{-3}
Argon (18)	A 37	1×10^{-3}	
	A 41	4×10^{-7}	
Arsenic (33)	As 73		5×10^{-3}
	As 74		5×10^{-4}
	As 76		2×10^{-4}
	As 77		8×10^{-4}
Barium (56)	Ba 131		2×10^{-3}
	Ba 140		3×10^{-4}
Beryllium (4)	Be 7		2×10^{-2}
Bismuth (83)	Bi 206		4×10^{-4}
Bromine (35)	Br 82	4×10^{-7}	3×10^{-3}
Cadmium (48)	Cd 109		2×10^{-3}
	Cd 115m		3×10^{-4}
	Cd 115		3×10^{-4}
Calcium (20)	Ca 45		9×10^{-5}
	Ca 47		5×10^{-4}
Carbon (6)	C 14	1×10^{-6}	8×10^{-3}
Cerium (58)	Ce 141		9×10^{-4}
	Ce 143		4×10^{-4}
	Ce 144		1×10^{-4}
Cesium (55)	Cs 131		2×10^{-2}
	Cs 134m		6×10^{-2}
	Cs 134		9×10^{-5}
Chlorine (17)	Cl 38	9×10^{-7}	4×10^{-3}
Chromium (24)	Cr 51		2×10^{-2}
Cobalt (27)	Co 57		5×10^{-3}
	Co 58		1×10^{-3}
	Co 60		5×10^{-4}
Copper (29)	Cu 64		3×10^{-3}
Dysprosium (66)	Dy 165		4×10^{-3}
	Dy 166		4×10^{-4}
Erbium (68)	Er 169		9×10^{-4}
	Er 171		1×10^{-3}
Europium (63)	Eu 152 (T/2 = 9.2 Hrs)		6×10^{-4}
	Eu 155		2×10^{-3}
Fluorine (9)	F 18	2×10^{-6}	8×10^{-3}
Gadolinium (64)	Gd 153		2×10^{-3}
	Gd 159		8×10^{-4}
Gallium (31)	Ga 72		4×10^{-4}
Germanium (32)	Ge 71		2×10^{-2}
Gold (79)	Au 196		2×10^{-3}
	Au 198		5×10^{-4}
	Au 199		2×10^{-3}
Hafnium (72)	Hf 181		7×10^{-4}
Hydrogen (1)	H 3	5×10^{-6}	3×10^{-2}
Indium (49)	In 113m		1×10^{-2}
	In 114m		2×10^{-4}
Iodine (53)	I 126	3×10^{-9}	2×10^{-5}
	I 131	3×10^{-9}	2×10^{-5}
	I 132	8×10^{-8}	6×10^{-4}
	I 133	1×10^{-8}	7×10^{-5}
	I 134	2×10^{-7}	1×10^{-3}
Iridium (77)	Ir 190		2×10^{-3}
	Ir 192		4×10^{-4}
	Ir 194		3×10^{-4}
Iron (26)	Fe 55		8×10^{-3}
	Fe 59		6×10^{-4}
Krypton (36)	Kr 85m	1×10^{-6}	
	Kr 85	3×10^{-6}	

[See footnotes at end of this table]

Element (atomic number)	Isotope	Col. I Gas concentration μCi/ml [1]	Col. II Liquid and solid concentration μCi/ml [2]
Lanthanum (57)	La 140		$2\cdot10^{-5}$
Lead (82)	Pb 203		$4\cdot10^{-5}$
Lutetium (71)	Lu 177		$1\cdot10^{-4}$
Manganese (25)	Mn 52		$3\cdot10^{-5}$
	Mn 54		$1\cdot10^{-4}$
	Mn 56		$1\cdot10^{-4}$
Mercury (80)	Hg 197m		$2\cdot10^{-4}$
	Hg 197		$3\cdot10^{-4}$
	Hg 203		$2\cdot10^{-5}$
Molybdenum (42)	Mo 99		$2\cdot10^{-4}$
Neodymium (60)	Nd 147		$6\cdot10^{-5}$
	Nd 149		$3\cdot10^{-4}$
Nickel (28)	Ni 65		$1\cdot10^{-4}$
Niobium (Columbium) (41)	Nb 95		$1\cdot10^{-4}$
	Nb 97		$9\cdot10^{-4}$
Osmium (76)	Os 185		$7\cdot10^{-5}$
	Os 191m		$3\cdot10^{-3}$
	Os 191		$2\cdot10^{-4}$
	Os 193		$6\cdot10^{-5}$
Palladium (46)	Pd 103		$3\cdot10^{-4}$
	Pd 109		$9\cdot10^{-5}$
Phosphorus (15)	P 32		$2\cdot10^{-5}$
Platinum (78)	Pt 191		$1\cdot10^{-4}$
	Pt 193m		$1\cdot10^{-3}$
	Pt 197m		$1\cdot10^{-3}$
	Pt 197		$1\cdot10^{-4}$
Potassium (19)	K 42		$3\cdot10^{-3}$
Praseodymium (59)	Pr 142		$3\cdot10^{-5}$
	Pr 143		$5\cdot10^{-5}$
Promethium (61)	Pm 147		$2\cdot10^{-4}$
	Pm 149		$4\cdot10^{-5}$
Rhenium (75)	Re 183		$6\cdot10^{-4}$
	Re 186		$9\cdot10^{-5}$
	Re 188		$6\cdot10^{-5}$
Rhodium (45)	Rh 103m		$1\cdot10^{-2}$
	Rh 105		$1\cdot10^{-4}$
Rubidium (37)	Rb 86		$7\cdot10^{-5}$
Ruthenium (44)	Ru 97		$4\cdot10^{-4}$
	Ru 103		$8\cdot10^{-5}$
	Ru 105		$1\cdot10^{-4}$
	Ru 106		$1\cdot10^{-5}$
Samarium (62)	Sm 153		$8\cdot10^{-5}$
Scandium (21)	Sc 46		$4\cdot10^{-5}$
	Sc 47		$9\cdot10^{-5}$
	Sc 48		$3\cdot10^{-5}$
Selenium (34)	Se 75		$3\cdot10^{-4}$
Silicon (14)	Si 31		$9\cdot10^{-4}$
Silver (47)	Ag 105		$1\cdot10^{-4}$
	Ag 110m		$3\cdot10^{-5}$
	Ag 111		$4\cdot10^{-5}$
Sodium (11)	Na 24		$2\cdot10^{-4}$
Strontium (38)	Sr 85		$1\cdot10^{-4}$
	Sr 89		$1\cdot10^{-5}$
	Sr 91		$7\cdot10^{-5}$
	Sr 92		$7\cdot10^{-5}$
Sulfur (16)	S 35	$9\cdot10^{-8}$	$6\cdot10^{-5}$
Tantalum (73)	Ta 182		$4\cdot10^{-5}$
Technetium (43)	Tc 96m		$1\cdot10^{-3}$
	Tc 96		$1\cdot10^{-4}$
Tellurium (52)	Te 125m		$2\cdot10^{-4}$
	Te 127m		$6\cdot10^{-5}$
	Te 127		$3\cdot10^{-4}$
	Te 129m		$3\cdot10^{-5}$
	Te 131m		$6\cdot10^{-5}$
	Te 132		$3\cdot10^{-5}$
Terbium (65)	Tb 160		$4\cdot10^{-5}$
Thallium (81)	Tl 200		$4\cdot10^{-4}$

[See footnotes at end of this table]

Element (atomic number)	Isotope	Col. I	Col. II
		Gas concentration μCi/ml [1]	Liquid and solid concentration μCi/ml [2]
	Tl 201		3×10^{-3}
	Tl 202		1×10^{-3}
	Tl 204		1×10^{-3}
Thulium (69)	Tm 170		5×10^{-4}
	Tm 171		5×10^{-3}
Tin (50)	Sn 113		9×10^{-4}
	Sn 125		2×10^{-4}
Tungsten (Wolfram) (74)	W 181		4×10^{-3}
	W 187		7×10^{-4}
Vanadium (23)	V 48		3×10^{-4}
Xenon (54)	Xe 131m	4×10^{-6}	
	Xe 133	3×10^{-6}	
	Xe 135	1×10^{-6}	
Ytterbium (70)	Yb 175		1×10^{-3}
Yttrium (39)	Y 90		2×10^{-4}
	Y 91m		3×10^{-2}
	Y 91		3×10^{-4}
	Y 92		6×10^{-4}
	Y 93		3×10^{-4}
Zinc (30)	Zn 65		1×10^{-3}
	Zn 69m		7×10^{-4}
	Zn 69		2×10^{-2}
Zirconium (40)	Zr 95		6×10^{-4}
	Zr 97		2×10^{-4}
Beta and/or gamma emitting byproduct material not listed above with half-life less than 3 years		1×10^{-10}	1×10^{-6}

Footnotes to Schedule A

[1] Values are given only for those materials normally used as gases.

[2] μCi/gm for solids.

Note 1: Many radioisotopes disintegrate into isotopes which are also radioactive. In expressing the concentrations in Schedule A, the activity stated is that of the parent isotope and takes into account the daughters.

Note 2: For purposes of § 30.14 where there is involved a combination of isotopes, the limit for the combination should be derived as follows:

Determine for each isotope in the product the ratio between the concentration present in the product and the exempt concentration established in Schedule A for the specific isotope when not in combination. The sum of such ratios may not exceed "1" (i.e., unity).

Example:

$$\frac{\text{Concentration of Isotope A in Product}}{\text{Exempt concentration of Isotope A}} + \frac{\text{Concentration of Isotope B in Product}}{\text{Exempt concentration of Isotope B}} \leq 1$$

[30 FR 8185, June 26, 1965, as amended at 35 FR 3982, Mar. 3, 1970; 38 FR 29314, Oct. 24, 1973]

§ 30.71 Schedule B.

Byproduct material	Microcuries
Antimony 122 (Sb 122)	100
Antimony 124 (Sb 124)	10
Antimony 125 (Sb 125)	10
Arsenic 73 (As 73)	100
Arsenic 74 (As 74)	10
Arsenic 76 (As 76)	10
Arsenic 77 (As 77)	100
Barium 131 (Ba 131)	10
Barium 133 (Ba 133)	10
Barium 140 (Ba 140)	10
Bismuth 210 (Bi 210)	1
Bromine 82 (Br 82)	10
Cadmium 109 (Cd 109)	10
Cadmium 115m (Cd 115m)	10
Cadmium 115 (Cd 115)	100
Calcium 45 (Ca 45)	10
Calcium 47 (Ca 47)	10
Carbon 14 (C 14)	100
Cerium 141 (Ce 141)	100

Byproduct material	Microcuries
Cerium 143 (Ce 143)	100
Cerium 144 (Ce 144)	1
Cesium 131 (Cs 131)	1,000
Cesium 134m (Cs 134m)	100
Cesium 134 (Cs 134)	1
Cesium 135 (Cs 135)	10
Cesium 136 (Cs 136)	10
Cesium 137 (Cs 137)	10
Chlorine 36 (Cl 36)	10
Chlorine 38 (Cl 38)	10
Chromium 51 (Cr 51)	1,000
Cobalt 58m (Co 58m)	10
Cobalt 58 (Co 58)	10
Cobalt 60 (Co 60)	1
Copper 64 (Cu 64)	100
Dysprosium 165 (Dy 165)	10
Dysprosium 166 (Dy 166)	100
Erbium 169 (Er 169)	100
Erbium 171 (Er 171)	100
Europium 152 9.2 h (Eu 152 9.2 h)	100
Europium 152 13 yr (Eu 152 13 yr)	1
Europium 154 (Eu 154)	1
Europium 155 (Eu 155)	10
Fluorine 18 (F 18)	1,000
Gadolinium 153 (Gd 153)	10
Gadolinium 159 (Gd 159)	100
Gallium 72 (Ga 72)	10
Germanium 71 (Ge 71)	100
Gold 198 (Au 198)	100
Gold 199 (Au 199)	100
Hafnium 181 (Hf 181)	10
Holmium 166 (Ho 166)	100
Hydrogen 3 (H 3)	1,000
Indium 113m (In 113m)	100
Indium 114m (In 114m)	10
Indium 115m (In 115m)	100
Indium 115 (In 115)	10
Iodine 125 (I 125)	1
Iodine 126 (I 126)	1
Iodine 129 (I 129)	0.1
Iodine 131 (I 131)	1
Iodine 132 (I 132)	10
Iodine 133 (I 133)	1
Iodine 134 (I 134)	10
Iodine 135 (I 135)	10
Iridium 192 (Ir 192)	10
Iridium 194 (Ir 194)	100
Iron 55 (Fe 55)	100
Iron 59 (Fe 59)	10
Krypton 85 (Kr 85)	100
Krypton 87 (Kr 87)	10
Lanthanum 140 (La 140)	10
Lutetium 177 (Lu 177)	100
Manganese 52 (Mn 52)	10
Manganese 54 (Mn 54)	10
Manganese 56 (Mn 56)	10
Mercury 197m (Hg 197m)	100
Mercury 197 (Hg 197)	100
Mercury 203 (Hg 203)	10
Molybdenum 99 (Mo 99)	100
Neodymium 147 (Nd 147)	100
Neodymium 149 (Nd 149)	100
Nickel 59 (Ni 59)	100
Nickel 63 (Ni 63)	10
Nickel 65 (Ni 65)	100
Niobium 93m (Nb 93m)	10
Niobium 95 (Nb 95)	10
Niobium 97 (Nb 97)	10
Osmium 185 (Os 185)	10
Osmium 191m (Os 191m)	100
Osmium 191 (Os 191)	100
Osmium 193 (Os 193)	100
Palladium 103 (Pd 103)	100
Palladium 109 (Pd 109)	100
Phosphorus 32 (P 32)	10
Platinum 191 (Pt 191)	100
Platinum 193m (Pt 193m)	100
Platinum 193 (Pt 193)	100
Platinum 197m (Pt 197m)	100
Platinum 197 (Pt 197)	100
Polonium 210 (Po 210)	0.1
Potassium 42 (K 42)	10
Praseodymium 142 (Pr 142)	100
Praseodymium 143 (Pr 143)	100
Promethium 147 (Pm 147)	10
Promethium 149 (Pm 149)	10
Rhenium 186 (Re 186)	100
Rhenium 188 (Re 188)	100
Rhodium 103m (Rh 103m)	100
Rhodium 105 (Rh 105)	100
Rubidium 86 (Rb 86)	10
Rubidium 87 (Rb 87)	10
Ruthenium 97 (Ru 97)	100
Ruthenium 103 (Ru 103)	10
Ruthenium 105 (Ru 105)	10
Ruthenium 106 (Ru 106)	1
Samarium 151 (Sm 151)	10
Samarium 153 (Sm 153)	100
Scandium 46 (Sc 46)	10
Scandium 47 (Sc 47)	100
Scandium 48 (Sc 48)	10
Selenium 75 (Se 75)	10
Silicon 31 (Si 31)	100
Silver 105 (Ag 105)	10
Silver 110m (Ag 110m)	1
Silver 111 (Ag 111)	100
Sodium 24 (Na 24)	10
Strontium 85 (Sr 85)	10
Strontium 89 (Sr 89)	1
Strontium 90 (Sr 90)	0.1
Strontium 91 (Sr 91)	10
Strontium 92 (Sr 92)	10
Sulphur 35 (S 35)	100
Tantalum 182 (Ta 182)	10
Technetium 96 (Tc 96)	10
Technetium 97m (Tc 97m)	100
Technetium 97 (Tc 97)	100
Technetium 99m (Tc 99m)	100
Technetium 99 (Tc 99)	10
Tellurium 125m (Te 125m)	10
Tellurium 127m (Te 127m)	10
Tellurium 127 (Te 127)	100
Tellurium 129m (Te 129m)	10
Tellurium 129 (Te 129)	100
Tellurium 131m (Te 131m)	10
Tellurium 132 (Te 132)	10
Terbium 160 (Tb 160)	10
Thallium 200 (Tl 200)	100
Thallium 201 (Tl 201)	100
Thallium 202 (Tl 202)	100
Thallium 204 (Tl 204)	10
Thulium 170 (Tm 170)	10
Thulium 171 (Tm 171)	10
Tin 113 (Sn 113)	10
Tin 125 (Sn 125)	10
Tungsten 181 (W 181)	10
Tungsten 185 (W 185)	10
Tungsten 187 (W 187)	100
Vanadium 48 (V 48)	10
Xenon 131m (Xe 131m)	1,000
Xenon 133 (Xe 133)	100
Xenon 135 (Xe 135)	100
Ytterbium 175 (Yb 175)	100
Yttrium 90 (Y 90)	10
Yttrium 91 (Y 91)	10
Yttrium 92 (Y 92)	100

Byproduct material	Microcuries
Yttrium 93 (Y 93)	100
Zinc 65 (Zn 65)	10
Zinc 69m (Zn 69m)	100
Zinc 69 (Zn 69)	1,000
Zirconium 93 (Zr 93)	10
Zirconium 95 (Zr 95)	10
Zirconium 97 (Zr 97)	10
Any byproduct material not listed above other than alpha emitting byproduct material	0.1

[35 FR 6427, Apr. 22, 1970, as amended at 36 FR 16898, Aug. 26, 1971]

§ 30.72 Schedule C—Quantities of radioactive materials requiring consideration of the need for an emergency plan for responding to a release.

Radioactive material [1]	Release fraction	Quantity (curies)
Actinium-228	0.001	4,000
Americium-241	.001	2
Americium-242	.001	2
Americium-243	.001	2
Antimony-124	.01	4,000
Antimony-126	.01	6,000
Barium-133	.01	10,000
Barium-140	.01	30,000
Bismuth-207	.01	5,000
Bismuth-210	.01	600
Cadmium-109	.01	1,000
Cadmium-113	.01	80
Calcium-45	.01	20,000
Californium-252	.001	9 (20 mg)
Carbon-14	.01	50,000
	Non CO	
Cerium-141	.01	10,000
Cerium-144	.01	300
Cesium-134	.01	2,000
Cesium-137	.01	3,000
Chlorine-36	.5	100
Chromium-51	.01	300,000
Cobalt-60	.001	5,000
Copper-64	.01	200,000
Curium-242	.001	60
Curium-243	.001	3
Curium-244	.001	4
Curium-245	.001	2
Europium-152	.01	500
Europium-154	.01	400
Europium-155	.01	3,000
Germanium-68	.01	2,000
Gadolinium-153	.01	5,000
Gold-198	.01	30,000
Hafnium-172	.01	400
Hafnium-181	.01	7,000
Holmium-166m	.01	100
Hydrogen-3	.5	20,000
Iodine-125	.5	10
Iodine-131	.5	10
Indium-114m	.01	1,000
Iridium-192	.001	40,000
Iron-55	.01	40,000
Iron-59	.01	7,000
Krypton-85	1.0	6,000,000
Lead-210	.01	8
Manganese-56	.01	60,000
Mercury-203	.01	10,000
Molybdenum-99	.01	30,000
Neptunium-237	.001	2
Nickel-63	.01	20,000
Niobium-94	.01	300
Phosphorus-32	.5	100
Phosphorus-33	.5	1,000
Polonium-210	.01	10
Potassium-42	.01	9,000
Promethium-145	.01	4,000
Promethium-147	.01	4,000
Ruthenium-106	.01	200
Samarium-151	.01	4,000
Scandium-46	.01	3,000
Selenium-75	.01	10,000
Silver-110m	.01	1,000
Sodium-22	.01	9,000
Sodium-24	.01	10,000
Strontium-89	.01	3,000
Strontium-90	.01	90
Sulfur-35	.5	900
Technetium-99	.01	10,000
Technetium-99m	.01	400,000
Tellurium-127m	.01	5,000
Tellurium-129m	.01	5,000
Terbium-160	.01	4,000
Thulium-170	.01	4,000
Tin-113	.01	10,000
Tin-123	.01	3,000
Tin-126	.01	1,000
Titanium-44	.01	100
Vanadium-48	.01	7,000
Xenon-133	1.0	900,000
Yttrium-91	.01	2,000
Zinc-65	.01	5,000
Zirconium-93	.01	400
Zirconium-95	.01	5,000
Any other beta-gamma emitter	.01	10,000
Mixed fission products	.01	1,000
Mixed corrosion products	.01	10,000
Contaminated equipment beta-gamma	.001	10,000
Irradiated material, any form other than solid noncombustible	.01	1,000
Irradiated material, solid noncombustible	.001	10,000
Mixed radioactive waste, beta-gamma	.01	1,000
Packaged mixed waste, beta-gamma [2]	.001	10,000
Any other alpha emitter	.001	2
Contaminated equipment, alpha	.0001	20
Packaged waste, alpha [2]	.0001	20
Combinations of radioactive materials listed above [1]		

[1] For combinations of radioactive materials, consideration of the need for an emergency plan is required if the sum of the ratios of the quantity of each radioactive material authorized to the quantity listed for that material in Schedule C exceeds one.

[2] Waste packaged in Type B containers does not require an emergency plan.

[54 FR 14061, Apr. 7, 1989]

APPENDIX A—CRITERIA RELATING TO USE OF FINANCIAL TESTS AND PARENT COMPANY GUARANTEES FOR PROVIDING REASONABLE ASSURANCE OF FUNDS FOR DECOMMISSIONING

I. Introduction

An applicant or licensee may provide reasonable assurance of the availability of funds for decommissioning based on obtaining a parent company guarantee that funds will be available for decommissioning costs and on a demonstration that the parent company passes a financial test. This appendix establishes criteria for passing the financial test and for obtaining the parent company guarantee.

II. Financial Test

A. To pass the financial test, the parent company must meet the criteria of either paragraph A.1 or A.2 of this section:

1. The parent company must have:

(i) Two of the following three ratios: A ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

(ii) Net working capital and tangible net worth each at least six times the current decommissioning cost estimates (or prescribed amount if a certification is used); and

(iii) Tangible net worth of at least $10 million; and

(iv) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the current decommissioning cost estimates (or prescribed amount if a certification is used).

2. The parent company must have:

(i) A current rating for its most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

(ii) Tangible net worth at least six times the current decommissioning cost estimate (or prescribed amount if a certification is used); and

(iii) Tangible net worth of at least $10 million; and

(iv) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the current decommissioning cost estimates (or prescribed amount if certification is used).

B. The parent company's independent certified public accountant must have compared the data used by the parent company in the financial test, which is derived from the independently audited, year end financial statements for the latest fiscal year, with the amounts in such financial statement. In connection with that procedure the licensee shall inform NRC within 90 days of any matters coming to the auditor's attention which cause the auditor to believe that the data specified in the financial test should be adjusted and that the company no longer passes the test.

C. 1. After the initial financial test, the parent company must repeat the passage of the test within 90 days after the close of each succeeding fiscal year.

2. If the parent company no longer meets the requirements of paragraph A of this section, the licensee must send notice to the Commission of intent to establish alternate financial assurance as specified in the Commission's regulations. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year end financial data show that the parent company no longer meets the financial test requirements. The licensee must provide alternate financial assurance within 120 days after the end of such fiscal year.

III. Parent Company Guarantee

The terms of a parent company guarantee which an applicant or licensee obtains must provide that:

A. The parent company guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the licensee and the Commission. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the licensee and the Commission, as evidenced by the return receipts.

B. If the licensee fails to provide alternate financial assurance as specified in the Commission's regulations within 90 days after receipt by the licensee and Commission of a notice of cancellation of the parent company guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the licensee.

C. The parent company guarantee and financial test provisions must remain in effect until the Commission has terminated the license.

D. If a trust is established for decommissioning costs, the trustee and trust must be acceptable to the Commission. An acceptable trustee includes an appropriate State or Federal Government agency or an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

[53 FR 24046, June 27, 1988]

PART 31—GENERAL DOMESTIC LICENSES FOR BYPRODUCT MATERIAL

Sec.
31.1 Purpose and scope.
31.2 Terms and conditions.
31.3 Certain devices and equipment.
31.4 Information collection requirements: OMB approval.
31.5 Certain measuring, gauging or controlling devices.
31.6 General license to install devices generally licensed in § 31.5.
31.7 Luminous safety devices for use in aircraft.
31.8 Americium-241 in the form of calibration or reference sources.
31.9 General license to own byproduct material.
31.10 General license for strontium 90 in ice detection devices.
31.11 General license for use of byproduct material for certain in vitro clinical or laboratory testing.
31.12 Maintenance of records.

AUTHORITY: Secs. 81, 161, 183, 68 Stat. 935, 948, 954, as amended (42 U.S.C. 2111, 2201, 2233); secs. 201, as amended, 202, 88 Stat. 1242, as amended, 1244 (42 U.S.C. 5841, 5842).

Section 31.6 is also issued under sec. 274, 73 Stat. 688 (42 U.S.C. 2021).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273); §§ 31.5(c)(1)-(3) and (5)-(9), 31.8(c), 31.10(b), and 31.11(b), (c), and (d) are issued under sec. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201(b)); and §§ 31.5(c)(4), (5), and (8), and 31.11(b) and (e) are issued under sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

§ 31.1 Purpose and scope.

This part establishes general licenses for the possession and use of byproduct material contained in certain items and a general license for ownership of byproduct material. Part 30 of this chapter also contains provisions applicable to the subject matter of this part.

[35 FR 6428, Apr. 22, 1970]

§ 31.2 Terms and conditions.

(a) The general licenses provided in this part are subject to the provision of §§ 30.14(d), 30.34(a) to (e), 30.41, 30.51 to 30.63 and Parts 19, 20, and 21 of this chapter[1] unless indicated otherwise in the language of the general license.

[38 FR 22220, Aug. 17, 1973, as amended at 38 FR 33969, Dec. 10, 1973; 42 FR 28896, June 6, 1977; 43 FR 6922, Feb. 17, 1978]

§ 31.3 Certain devices and equipment.

A general license is hereby issued to transfer, receive, acquire, own, possess and use byproduct material incorporated in the following devices or equipment which have been manufactured, tested and labeled by the manufacturer in accordance with the specifications contained in a specific license issued to him by the Commission.

(a) *Static elimination device.* Devices designed for use as static eliminators which contain, as a sealed source or sources, byproduct material consisting of a total of not more than 500 microcuries of polonium 210 per device.

(b)-(c) [Reserved]

(d) *Ion generating tube.* Devices designed for ionization of air which contain, as a sealed source or sources, byproduct material consisting of a total of not more than 500 microcuries of polonium 210 per device or of a total of not more than 50 millicuries of hydrogen 3 (tritium) per device.

[30 FR 8189, June 26, 1965, as amended at 34 FR 6652, Apr. 18, 1969; 35 FR 3982, Mar. 3, 1970]

§ 31.4 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). OMB has approved the information collection requirements contained in this part under control number 3150-0016.

(b) The approved information collection requirements contained in this part appear in §§ 31.5, 31.8, and 31.11.

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[1] Attention is directed particularly to the provisions of the regulations in Part 20 of this chapter which relate to the labeling of containers.

) This part contains information ection requirements in addition to se approved under the control aber specified in paragraph (a) of section. These information collec- requirements and the control abers under which they are ap- ved are as follows:

) In § 31.11. Form NRC-483 is ap- ved under control number 3150- .

FR 19625, May 9, 1984; 49 FR 21699, 23, 1984]

5 Certain measuring, gauging or controlling devices.[2]

) A general license is hereby issued ommercial and industrial firms and arch, educational and medical in- utions, individuals in the conduct heir business, and Federal, State or l government agencies to acquire, eive, possess, use or transfer, in ac- lance with the provisions of para- phs (b), (c) and (d) of this section, roduct material contained in de- s designed and manufactured for purpose of detecting, measuring, ging or controlling thickness, den- , level, interface location, radi- n, leakage, or qualitative or quanti- ve chemical composition, or for ducing light or an ionized atmos- re.

) The general license in paragraph of this section applies only to by- duct material contained in devices ch have been manufactured or ini- ly transferred and labeled in ac- lance with the specifications con- ed in a specific license issued pur- nt to § 32.51 of this chapter or in ordance with the specifications tained in a specific license issued an Agreement State which author- distribution of the devices to per- s generally licensed by the Agree- nt State.

) Any person who acquires, re- es, possesses, uses or transfers by- duct material in a device pursuant to the general license in paragraph (a) of this section:

(1) Shall assure that all labels affixed to the device at the time of receipt and bearing a statement that removal of the label is prohibited are maintained thereon and shall comply with all instructions and precautions provided by such labels;

(2) Shall assure that the device is tested for leakage of radioactive material and proper operation of the on-off mechanism and indicator, if any, at no longer than six-month intervals or at such other intervals as are specified in the label; however:

(i) Devices containing only krypton need not be tested for leakage of radioactive material, and

(ii) Devices containing only tritium or not more than 100 microcuries of other beta and/or gamma emitting material or 10 microcuries of alpha emitting material and devices held in storage in the original shipping container prior to initial installation need not be tested for any purpose;

(3) Shall assure that the tests required by paragraph (c)(2) of this section and other testing, installation, servicing, and removal from installation involving the radioactive materials, its shielding or containment, are performed:

(i) In accordance with the instructions provided by the labels; or

(ii) By a person holding a specific license pursuant to Parts 30 and 32 of this chapter or from an Agreement State to perform such activities;

(4) Shall maintain records showing compliance with the requirements of paragraphs (c)(2) and (c)(3) of this section. The records must show the results of tests. The records also must show the dates of performance of, and the names of persons performing, testing, installing, servicing, and removing from the installation radioactive material and its shielding or containment. The licensee shall retain these records as follows:

(i) Each record of a test for leakage or radioactive material required by paragraph (c)(2) of this section must be retained for three years after the next required leak test is performed or until the sealed source is transferred or disposed of.

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ersons possessing byproduct material in ces under the general license in § 31.5 re Jan. 15, 1975, may continue to pos- , use or transfer that material in accord- e with the requirements of § 31.5 in ct on Jan. 14, 1975.

(ii) Each record of a test of the on-off mechanism and indicator required by paragraph (c)(2) of this section must be retained for three years after the next required test of the on-off mechanism and indicator is performed or until the sealed source is transferred or disposed of.

(iii) Each record that is required by paragraph (c)(3) of this section must be retained for three years from the date of the recorded event or until the device is transferred or disposed of.

(5) Upon the occurrence of a failure of or damage to, or any indication of a possible failure of or damage to, the shielding of the radioactive material or the on-off mechanism or indicator, or upon the detection of 0.005 microcurie or more removable radioactive material, shall immediately suspend operation of the device until it has been repaired by the manufacturer or other person holding a specific license pursuant to Parts 30 and 32 of this chapter or from an Agreement State to repair such devices, or disposed of by transfer to a person authorized by a specific license to receive the byproduct material contained in the device and, within 30 days, furnish to the Administrator of the appropriate Nuclear Regulatory Commission, Regional Office listed in Appendix D of Part 20 of this chapter, a report containing a brief description of the event and the remedial action taken;

(6) Shall not abandon the device containing byproduct material;

(7) Shall not export the device containing byproduct material except in accordance with Part 110 of this chapter;

(8) Except as provided in paragraph (c)(9) of this section, shall transfer or dispose of the device containing byproduct material only by transfer to persons holding a specific license pursuant to Parts 30 and 32 of this chapter or from an Agreement State to receive the device and within 30 days after transfer of a device to a specific licensee shall furnish to the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555 a report containing identification of the device by manufacturer's name and model number and the name and address of the person receiving the device. No report is required if the device is transferred to the specific licensee in order to obtain a replacement device;

(9) Shall transfer the device to another general licensee only:

(i) Where the device remains in use at a particular location. In such case the transferor shall give the transferee a copy of this section and any safety documents identified in the label of the device and within 30 days of the transfer, report to the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, the manufacturer's name and model number of device transferred, the name and address of the transferee, and the name and/or position of an individual who may constitute a point of contact between the Commission and the transferee; or

(ii) Where the device is held in storage in the original shipping container at its intended location of use prior to initial use by a general licensee.

(10) Shall comply with the provisions of §§ 20.402 and 20.403 of this chapter for reporting radiation incidents, theft or loss of licensed material, but shall be exempt from the other requirements of Parts 19, 20, and 21, of this chapter.

(d) The general license in paragraph (a) of this section does not authorize the manufacture or import of devices containing byproduct material.

[39 FR 43532, Dec. 16, 1974, as amended at 40 FR 8785, Mar. 3, 1975; 40 FR 14085, Mar. 28, 1975; 42 FR 25721, May 19, 1977; 42 FR 28896, June 6, 1977; 43 FR 6922, Feb. 17, 1978; 53 FR 19246, May 27, 1988]

§ 31.6 General license to install devices generally licensed in § 31.5.

Any person who holds a specific license issued by an Agreement State authorizing the holder to manufacture, install, or service a device described in § 31.5 within such Agreement State is hereby granted a general license to install and service such device in any non-Agreement State and a general license to install and service such device in offshore waters, as defined in § 150.3(f) of this chapter: *Provided*, That:

(a) [Reserved]

(b) The device has been manufactured, labeled, installed, and serviced in accordance with applicable provisions of the specific license issued to such person by the Agreement State.

(c) Such person assures that any labels required to be affixed to the device under regulations of the Agreement State which licensed manufacture of the device bear a statement that removal of the label is prohibited.

[30 FR 8189, June 26, 1965, as amended at 30 FR 10947, Aug. 24, 1965; 39 FR 43533, Dec. 16, 1974; 46 FR 44151, Sept. 3, 1981]

§ 31.7 Luminous safety devices for use in aircraft.

(a) A general license is hereby issued to own, receive, acquire, possess, and use tritium or promethium-147 contained in luminous safety devices for use in aircraft, provided each device contains not more than 10 curies of tritium or 300 millicuries of promethium-147 and that each device has been manufactured, assembled or initially transferred in accordance with a license issued under the provisions of § 32.53 of this chapter or manufactured or assembled in accordance with a specific license issued by an Agreement State which authorizes manufacture or assembly of the device for distribution to persons generally licensed by the Agreement State.

(b) Persons who own, receive, acquire, possess or use luminous safety devices pursuant to the general license in this section are exempt from the requirements of Parts 19, 20, and 21, of this chapter, except that they shall comply with the provisions of §§ 20.402 and 20.403 of this chapter.

(c) This general license does not authorize the manufacture, assembly, repair or import of luminous safety devices containing tritium or promethium-147.

(d) This general license does not authorize the export of luminous safety devices containing tritium or promethium-147.

(e) This general license does not authorize the ownership, receipt, acquisition, possession or use of promethium-147 contained in instrument dials.

[30 FR 8189, June 26, 1965, as amended at 33 FR 6463, Apr. 27, 1968; 38 FR 22220, Aug. 17, 1973; 42 FR 28896, June 6, 1977; 43 FR 6922, Feb. 17, 1978]

§ 31.8 Americium-241 in the form of calibration or reference sources.

(a) A general license is hereby issued to those persons listed below to own, receive, acquire, possess, use and transfer, in accordance with the provisions of paragraphs (b) and (c) of this section, americium-241 in the form of calibration or reference sources:

(1) Any person in a non-Agreement State who holds a specific license issued pursuant to this chapter which authorizes him to receive, possess, use and transfer byproduct material, source material, or special nuclear material; and

(2) Any Government agency, as defined in § 30.4(g) of this chapter, which holds a specific license issued pursuant to this chapter which authorizes it to receive, possess, use and transfer byproduct material, source material, or special nuclear material.

(b) The general license in paragraph (a) of this section applies only to calibration or reference sources which have been manufactured or initially transferred in accordance with the specifications contained in a specific license issued pursuant to § 32.57 of this chapter or in accordance with the specifications contained in a specific license issued to the manufacturer by an Agreement State which authorizes manufacture of the sources for distribution to persons generally licensed by the Agreement State.

(c) The general license in paragraph (a) of this section is subject to the provisions of §§ 30.14(d), 30.34 (a) to (e), and 30.51 to 30.63 of this chapter, and to the provisions of Parts 19, 20, and 21, of this chapter. In addition, persons who own, receive, acquire, possess, use and transfer one or more calibration or reference sources pursuant to this general license:

(1) Shall not possess at any one time, at any one location of storage or use, more than 5 microcuries of americium-241 in such sources;

(2) Shall not receive, possess, use or transfer such source unless the source, or the storage container, bears a label

which includes the following statement or a substantially similar statement which contains the information called for in the following statement:[1]

> The receipt, possession, use and transfer of this source, Model ——, Serial No. ——, are subject to a general license and the regulations of the United States Nuclear Regulatory Commission or of a State with which the Commission has entered into an agreement for the exercise of regulatory authority. Do not remove this label.
>
> CAUTION – RADIOACTIVE MATERIAL —THIS SOURCE CONTAINS AMERICIUM-241. DO NOT TOUCH RADIOACTIVE PORTION OF THIS SOURCE.
>
> ————————(Name of manufacturer or initial transferor)

(3) Shall not transfer, abandon, or dispose of such source except by transfer to a person authorized by a license pursuant to this chapter or from an Agreement State to receive the source.

(4) Shall store such source, except when the source is being used, in a closed container adequately designed and constructed to contain americium-241 which might otherwise escape during storage.

(5) Shall not use such source for any purpose other than the calibration of radiation detectors or the standardization of other sources.

(d) This general license does not authorize the manufacture or import of calibration or reference sources containing americium-241.

(e) This general license does not authorize the export of calibration or reference sources containing americium-241.

[30 FR 8189, June 26, 1965, as amended at 38 FR 22220, Aug. 17, 1973; 40 FR 8785, Mar. 3, 1975; 42 FR 28896, June 6, 1977; 43 FR 6922, Feb. 17, 1978]

§ 31.9 General license to own byproduct material.

A general license is hereby issued to own byproduct material without regard to quantity. Notwithstanding any other provision of this chapter, a general licensee under this paragraph is not authorized to manufacture, produce, transfer, receive, possess, use, import or export byproduct material, except as authorized in a specific license.

[30 FR 8189, June 26, 1965]

§ 31.10 General license for strontium 90 in ice detection devices.

(a) A general license is hereby issued to own, receive, acquire, possess, use, and transfer strontium 90 contained in ice detection devices, provided each device contains not more than fifty microcuries of strontium 90 and each device has been manufactured or initially transferred in accordance with the specifications contained in a license issued pursuant to § 32.61 of this chapter or in accordance with the specifications contained in a specific license issued to the manufacturer by an Agreement State which authorizes manufacture of the ice detection devices for distribution to persons generally licensed by the Agreement State.

(b) Persons who own, receive, acquire, possess, use, or transfer strontium 90 contained in ice detection devices pursuant to the general license in paragraph (a) of this section:

(1) Shall, upon occurrence of visually observable damage, such as a bend or crack or discoloration from overheating, to the device, discontinue use of the device until it has been inspected, tested for leakage and repaired by a person holding a specific license pursuant to Part 30 or 32 of this chapter or from an Agreement State to manufacture or service such devices; or shall dispose of the device pursuant to the provisions of § 20.301 of this chapter;

(2) Shall assure that all labels affixed to the device at the time of receipt, and which bear a statement which prohibits removal of the labels, are maintained thereon;

(3) Are exempt from the requirements of Parts 19, 20, and 21, of this chapter except that such persons shall comply with the provisions of §§ 20.301, 20.402, and 20.403 of this chapter.

(c) The general license does not authorize the manufacture, assembly, disassembly, repair, or import of strontium 90 in ice detection devices.

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[1] Sources generally licensed under this section prior to January 19, 1975 may bear labels authorized by the regulations in effect on January 1, 1975.

[30 FR 9905, Aug. 10, 1965, as amended at 38 FR 22220, Aug. 17, 1973; 40 FR 8785, Mar. 3, 1975; 42 FR 28896, June 6, 1977; 43 FR 6922, Feb. 17, 1978]

§ 31.11 General license for use of byproduct material for certain in vitro clinical or laboratory testing.

(a) A general license is hereby issued to any physician, veterinarian in the practice of veterinary medicine, clinical laboratory or hospital to receive, acquire, possess, transfer, or use, for any of the following stated tests, in accordance with the provisions of paragraphs (b), (c), (d), (e), and (f) of this section, the following byproduct materials in prepackaged units:

(1) Iodine-125, in units not exceeding 10 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(2) Iodine-131, in units not exceeding 10 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(3) Carbon-14, in units not exceeding 10 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(4) Hydrogen-3 (tritium), in units not exceeding 50 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(5) Iron-59, in units not exceeding 20 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings, or animals.

(6) Selenium-75, in units not exceeding 10 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(7) Mock Iodine-125 reference or calibration sources, in units not exceeding 0.05 microcurie of iodine-129 and 0.005 microcurie of americium-241 each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(b) A person shall not receive, acquire, possess, use, or transfer byproduct material under the general license established by paragraph (a) of this section unless that person:

(1) Has filed Form NRC-483, "Registration Certificate—In Vitro Testing with Byproduct Material Under General License," with the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555 and received from the Commission a validated copy of Form NRC-483 with a registration number assigned; or

(2) Has a license that authorizes the medical use of byproduct material that was issued under Part 35 of this chapter.

(c) A person who receives, acquires, possesses, or uses byproduct material pursuant to the general license established by paragraph (a) of this section shall comply with the following:

(1) The general licensee shall not possess at any one time, pursuant to the general license in paragraph (a) of this section, at any one location of storage or use, a total amount of iodine 125, iodine 131, selenium-75, and/or iron-59 in excess of 200 microcuries.

(2) The general licensee shall store the byproduct material, until used, in the original shipping container or in a container providing equivalent radiation protection.

(3) The general licensee shall use the byproduct material only for the uses authorized by paragraph (a) of this section.

(4) The general licensee shall not transfer the byproduct material except by transfer to a person authorized to receive it by a license pursuant to this chapter or from an Agreement State, nor transfer the byproduct ma-

terial in any manner other than in the unopened, labeled shipping container as received from the supplier.

(5) The general licensee shall dispose of the Mock Iodine-125 reference or calibration sources described in paragraph (a)(7) of this section as required by § 20.301 of this chapter.

(d) The general licensee shall not receive, acquire, possess, or use byproduct material pursuant to paragraph (a) of this section:

(1) Except as prepackaged units which are labeled in accordance with the provisions of a specific license issued under the provisions of § 32.71 of this chapter or in accordance with the provisions of a specific license issued by an Agreement State that authorizes manufacture and distribution of iodine-125, iodine-131, carbon-14, hydrogen-3 (tritium), selenium-75, iron-59, or Mock Iodine-125 for distribution to persons generally licensed by the Agreement State.

(2) Unless the following statement, or a substantially similar statement which contains the information called for in the following statement, appears on a label affixed to each prepackaged unit or appears in a leaflet or brochure which accompanies the package:[1]

> This radioactive material may be received, acquired, possessed, and used only by physicians, veterinarians in the practice of veterinary medicine, clinical laboratories or hospitals and only for in vitro clinical or laboratory tests not involving internal or external administration of the material, or the radiation therefrom, to human beings or animals. Its receipt, acquisition, possession, use, and transfer are subject to the regulations and a general license of the U.S. Nuclear Regulatory Commission or of a State with which the Commission has entered into an agreement for the exercise of regulatory authority.
>
> ---------------------------
>
> (Name of Manufacturer)

(e) The registrant possessing or using byproduct materials under the general license of paragraph (a) of this section shall report in writing to the Director of Nuclear Material Safety and Safeguards, any changes in the information furnished by him in the "Registration Certificate—In Vitro Testing With Byproduct Material Under General License", Form NRC-483. The report shall be furnished within 30 days after the effective date of such change.

(f) Any person using byproduct material pursuant to the general license of paragraph (a) of this section is exempt from the requirements of Parts 19, 20, and 21, of this chapter with respect to byproduct materials covered by that general license, except that such persons using the Mock Iodine-125 described in paragraph (a)(7) of this section shall comply with the provisions of §§ 20.301, 20.402, and 20.403 of this chapter.

[33 FR 16553, Nov. 14, 1968, as amended at 38 FR 1271, Jan. 11, 1973; 38 FR 34110, Dec. 11, 1973; 39 FR 26147, July 17, 1974; 40 FR 8785, Mar. 3, 1975; 41 FR 16446, Apr. 19, 1976; 42 FR 21604, Apr. 28, 1977; 42 FR 26987, May 26, 1977; 42 FR 28896, June 6, 1977; 44 FR 50325, Aug. 28, 1979; 51 FR 36967, Oct. 16, 1986]

§ 31.12 Maintenance of records.

Each record required by this part must be legible throughout the retention period specified by each Commission regulation. The record may be the original or a reproduced copy or a microform provided that the copy or microform is authenticated by authorized personnel and that the microform is capable of producing a clear copy throughout the required retention period. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records such as letters, drawings, specifications, must include all pertinent information such as letters, stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.

[53 FR 19246, May 27, 1988]

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[1] Labels authorized by the regulations in effect on September 26, 1979, may be used until one year from September 27, 1979.

PART 32—SPECIFIC DOMESTIC LICENSES TO MANUFACTURE OR TRANSFER CERTAIN ITEMS CONTAINING BYPRODUCT MATERIAL

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Sec.

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32.210 Registration of product information.

AUTHORITY: Secs. 81, 161, 182, 183, 68 Stat. 935, 948, 953, 954, as amended (42 U.S.C.

2111, 2201, 2232, 2233); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273; §§ 32.13, 32.15(a), (c), and (d), 32.19, 32.25(a) and (b), 32.29(a) and (b), 32.54, 32.55(a), (b), and (d), 32.58, 32.59, 32.62, and 32.210 are issued under sec. 161B, 68 Stat. 948, as amended (42 U.S.C. 2201(b)); and §§ 32.12, 32.16, 32.20, 32.25(c), 32.29(c), 32.51a, 32.52, 32.56, and 32.210 are issued under sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

SOURCE: 30 FR 8192, June 26, 1965, unless otherwise noted.

§ 32.1 Purpose and scope.

(a) This part prescribes requirements for the issuance of specific licenses to persons who manufacture or initially transfer items containing byproduct material for sale or distribution to:

(1) Persons exempted from the licensing requirements of Part 30 of this chapter, or

(2) Persons generally licensed under Part 31 or 35 of this chapter.

This part also prescribes certain regulations governing holders of these licenses. In addition, this part prescribes requirements for the issuance of specific licenses to persons who introduce byproduct material into a product or material owned by or in the possession of the licensee or another and regulations governing holders of such licenses. Further, this part describes procedures and prescribes requirements for the issuance of certificates of registration (coverning radiation safety information about a product) to manufacturers or initial transferors of sealed source or devices containing sealed sources which are to be used by persons specifically licensed under Part 30 of this chapter or equivalent regulations of an Agreement State.

(b) The provisions and requirements of this part are in addition to, and not in substitution for, other requirements of this chapter. In particular, the provisions of Part 30 of this chapter apply to applications and licenses subject to this part.

[30 FR 8192, June 26, 1965, as amended at 52 FR 27786, July 24, 1987]

§ 32.2 Definitions.

As used in this part:

(a) "Dose commitment" means the total radiation dose to a part of the body that will result from retention in the body of radioactive material. For purposes of estimating the dose commitment, it is assumed that from the time of intake the period of exposure to retained material will not exceed 50 years.

(b) "Lot Tolerance Percent Defective" means, expressed in percent defective, the poorest quality in an individual inspection lot that should be accepted.

[34 FR 6653, Apr. 18, 1969, as amended at 39 FR 22129, June 20, 1974]

§ 32.3 Maintenance of records.

Each record required by this part must be legible throughout the retention period specified by each Commission regulation. The record may be the original or a reproduced copy of a microform provided that the copy or microform is authenticated by authorized personnel and that the microform is capable of producing a clear copy throughout the required retention period. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records such as letters, drawings, specifications, must include all pertinent information such as stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.

[53 FR 19246, May 27, 1988]

§ 32.8 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). OMB has approved the information collection requirements contained in this part under control number 3150-0001.

(b) The approved information collection requirements contained in this part appear in §§ 32.12, 32.14, 32.15, 32.16, 32.17, 32.18, 32.19, 32.20, 32.22, 32.25, 32.26, 32.29, 32.51, 32.51a, 32.52, 32.53, 32.54, 32.56, 32.57, 32.58, 32.61, 32.70, 32.71, 32.72, 32.73, and 32.74.

(c) This part contains information collection requirements in addition to those approved under the control number specified in paragraph (a) of this section. These information collection requirements and the control numbers under which they are approved are as follows:

(1) In § 32.11, Form NRC-313I is approved under control number 3150-0042.

[49 FR 19625, May 9, 1984]

Subpart A—Exempt Concentrations and Items

§ 32.11 Introduction of byproduct material in exempt concentrations into products or materials, and transfer of ownership or possession: Requirements for license.

An application for a specific license on Form NRC-313 authorizing the introduction of byproduct material into a product or material owned by or in the possession of the licensee or another and the transfer of ownership or possession of the product or material containing the byproduct material will be approved if the applicant:

(a) Satisfies the general requirements specified in § 30.33 of this chapter;

(b) Provides a description of the product or material into which the byproduct material will be introduced, intended use of the byproduct material and the product or material into which it is introduced, method of introduction, initial concentration of the byproduct material in the product or material, control methods to assure that no more than the specified concentration is introduced into the product or material, estimated time interval between introduction and transfer of the product or material, and estimated concentration of the radioisotopes in the product or material at the time of transfer; and

(c) Provides reasonable assurance that the concentrations of byproduct material at the time of transfer will not exceed the concentrations in § 30.70 of this chapter, that reconcentration of the byproduct material in concentrations exceeding those in § 30.70 is not likely, that use of lower concentrations is not feasible, and that the product or material is not likely to be incorporated in any food, beverage, cosmetic, drug or other commodity or product designed for ingestion or inhalation by, or application to, a human being.

[30 FR 8192, June 26, 1965, as amended at 49 FR 19625, May 9, 1984]

§ 32.12 Same: Records and material transfer reports.

(a) Each person licensed under § 32.11 shall maintain records of transfer of material and file a report with the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the appropriate NRC Regional Office listed in Appendix D of Part 20 of this chapter.

(b) The report must identify the:

(1) Type and quantity of each product or material into which byproduct material has been introduced during the reporting period;

(2) Name and address of the person who owned or possessed the product or material, into which byproduct material has been introduced, at the time of introduction;

(3) The type and quantity of radionuclide introduced into each product or material; and

(4) The initial concentrations of the radionuclide in the product or material at time of transfer of the byproduct material by the licensee.

(c) The licensee shall file the report within 30 days following:

(1) Five years after filing the preceding report; or

(2) Filing an application for renewal of the license under § 30.37; or

(3) Notifying the Commission under § 30.34(f) of the licensee's decision to permanently discontinue activities authorized under the license issued under § 32.11.

(d) The report must cover the period between the filing of the preceding report and the occurrence specified in paragraphs (c) (1), (2), or (3) of this section. If no transfers of byproduct material have been made under § 32.11 during the reporting period, the report shall so indicate.

(e) The licensee shall maintain the record of a transfer for a period of one year after the event is included in a report to the Commission.

[48 FR 12333, Mar. 24, 1983; 48 FR 14863, Apr. 6, 1983]

§ 32.13 Same: Prohibition of introduction.

No person may introduce byproduct material into a product or material knowing or having reason to believe that it will be transferred to persons exempt under § 30.14 of this chapter or equivalent regulations of an Agreement State, except in accordance with a license issued pursuant to § 32.11 or the general license provided in § 150.20 of this chapter.

[30 FR 8192, June 26, 1965]

§ 32.14 Certain items containing byproduct material; requirements for license to apply or initially transfer.

An application for a specific license to apply byproduct material to, or to incorporate byproduct material into, the products specified in § 30.15 of this chapter or to initially transfer for sale or distribution such products containing byproduct material for use pursuant to § 30.15 of this chapter will be approved if:

(a) The applicant satisfies the general requirements specified in § 30.33 of this chapter;

(b) The applicant submits sufficient information regarding the product pertinent to evaluation of the potential radiation exposure, including:

(1) Chemical and physical form and maximum quantity of byproduct material in each product;

(2) Details of construction and design of each product;

(3) The method of containment or binding of the byproduct material in the product;

(4) Procedures for and results of prototype testing to demonstrate that the material will not become detached from the product and that the byproduct material will not be released to the environment under the most severe conditions likely to be encountered in normal use of the product;

(5) Quality control procedures to be followed in the fabrication of production lots of the product and the quality control standards the product will be required to meet;

(6) The proposed method of labeling or marking each unit, except timepieces or hands or dials containing tritium or promethium-147, and its container with the identification of the manufacturer or initial transferor of the product and the byproduct material in the product;

(7) For products for which limits on levels of radiation are specified in § 30.15 of this chapter, the radiation level and the method of measurement;

(8) Any additional information, including experimental studies and tests, required by the Commission to facilitate a determination of the safety of the product.

(c) Each product will contain no more than the quantity of byproduct material specified for that product in § 30.15 of this chapter. The levels of radiation from each product containing byproduct material will not exceed the limits specified for that product in § 30.15 of this chapter.

(d) The Commission determines that:

(1) The method of containment or binding of the byproduct material in the product is such that the radioactive material will not be released or be removed from the product under the most severe conditions which are likely to be encountered in normal use and handling. Tritium will be considered to be properly bound to dials, hands, and pointers if there is no visible flaking or chipping and the total loss of tritium does not exceed 5 percent of the total tritium when prototype dials, hands, and pointers are subjected to the following tests in the order specified below.

(i) Attachment of dials to a vibrating fixture and vibration at a rate of not less than 26 cycles per second and a vibration acceleration of not less than 2G for a period of not less than one hour; and

(ii) Attachment of the hub ends of the hands or pointers to a clamp and bending of hands or pointers over a 1-inch diameter cylinder; and

(iii) Total immersion of the dials, hands and pointers used in the tests described in paragraphs (d)(1)(i) and (ii) of this section in 100 milliliters of water at room temperature for a period of 24 consecutive hours and analysis of the test water for its radioactive material content by liquid scintillation counting or other equally sensitive method.

(2) The product has been subjected to and meets the requirements of the prototype tests. Prototype tests for automobile lock illuminators are prescribed by § 32.40, Schedule A.

[31 FR 5316, Apr. 2, 1966, as amended at 34 FR 6652, Apr. 18, 1969; 43 FR 6922, Feb. 17, 1978]

§ 32.15 Same: Quality assurance, prohibition of transfer, and labeling.

(a) Each person licensed under § 32.14 shall:

(1) Maintain quality assurance practices in the manufacture of the part or product, or the installation of the part into the product;

(2) Subject inspection lots to such testing as may be required as a condition of the license issued under § 32.14 taking a random sample of the size required by the tables in § 32.110, and for Lot Tolerance Percent Defective of 5.0 percent, accept or reject inspection lots in accordance with the directions of § 32.110; and

(3) Visually inspect each unit, except electron tubes containing byproduct material, in inspection lots. Any unit which has an observable physical defect that could affect containment of the byproduct material shall be considered as a defective unit.

(b) An application for a license or for amendment of a license may include a description of procedures proposed as alternatives to those prescribed by paragraph (a)(2) of this section, and proposed criteria for acceptance under those procedures. The Commission will approve the proposed alternative procedures if the applicant demonstrates that the operating characteristic curve or confidence interval estimate for the alternative procedures provides a Lot Tolerance Percent Defective of 5.0 percent at the consumer's risk of 0.10.

(c) No person licensed under § 32.14 shall transfer to other persons for use under § 30.15 of this chapter or equivalent regulations of an Agreement State:

(1) Any part or product which has been tested and found defective under the criteria and procedures specified in the license issued under § 32.14, unless the defective units have been repaired or reworked and have then met such criteria as may be required as a condition of the license issued under § 32.14; or

(2) Any inspection lot which has been rejected as a result of the procedures in § 32.110 or alternative procedures in paragraph (b) of this section, unless the defective units have been sorted and removed or have been repaired or reworked and have then met such criteria as may be required as a condition of the license issued under § 32.14.

(d) Label or mark each unit, except timepieces or hands or dials containing tritium or promethium-147, and its container so that the manufacturer or initial transferor of the product and the byproduct material in the product can be identified.

[31 FR 5317, Apr. 2, 1966, as amended at 34 FR 6652, Apr. 18, 1969; 39 FR 22129, June 20, 1974; 43 FR 6922, Feb. 17, 1978]

§ 32.16 Certain items containing byproduct material: Records and reports of transfer.

(a) Each person licensed under § 32.14 or § 32.17 shall maintain records of transfer of material and report to the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the appropriate NRC Regional Office listed in Appendix D of Part 20 of this chapter.

(b) The report must include the following information on items transferred to other persons for use under § 30.15 or § 30.16 of this chapter or equivalent regulations of an Agreement State:

(1) A description or identification of the type of each product;

(2) For each radionuclide in each type of product, the total quantity of the radionuclide; and

(3) The number of units of each type of product transferred during the reporting period.

(c) The licensee shall file the report within 30 days after:

(1) Five years after filing the preceding report; or

(2) Filing an application for renewal of the license under § 30.37; or

(3) Notifying the Commission under § 30.34(f) of the licensee's decision to permanently discontinue activities authorized under the license issued under § 32.14 or § 32.17.

(d) The report must cover the period between the filing of the preceding report and the occurrence specified in paragraphs (c) (1), (2), or (3) of this section. If no transfers of byproduct material have been made under § 32.14 or § 32.17 during the reporting period, the report must so indicate.

(e) The licensee shall maintain the record of a transfer for a period of one year after the event is included in a report to the Commission.

[48 FR 12333, Mar. 24, 1983; 48 FR 23383, May 25, 1983]

§ 32.17 Resins containing scandium-46 and designed for sand-consolidation in oil wells: requirements for license to manufacture, or initially transfer for sale or distribution.

An application for a specific license to manufacture, or initially transfer for sale or distribution, synthetic plastic resins containing scandium-46 for use pursuant to § 30.16 of this chapter will be approved if:

(a) The applicant satisfies the general requirements specified in § 30.33 of this chapter;

(b) The product is designed to be used only for sand-consolidation in oil wells;

(c) The applicant submits the following information:

(1) The general description of the product to be manufactured or initially transferred.

(2) A description of control procedures to be used to assure that the concentration of scandium-46 in the final product at the time of distribution will not exceed 1.4×10^{-3} microcurie/milliliter.

(d) Each container of such product will bear a durable, legible lable approved by the Commission, which contains the following information:

(1) The product name;

(2) A statement that the product contains radioactive scandium and is designed and manufactured only for sand-consolidation in oil wells;

(3) Instructions necessary for proper use; and

(4) The manufacturer's name.

[32 FR 4241, Mar. 18, 1967, as amended by 38 FR 29314, Oct. 24, 1973; 43 FR 6922, Feb. 17, 1978]

§ 32.18 Manufacture, distribution and transfer of exempt quantities of byproduct material: Requirements for license.

An application for a specific license to manufacture, process, produce, package, repackage, or transfer quantities of byproduct material for commercial distribution to persons exempt pursuant to § 30.18 of this chapter or the equivalent regulations of an Agreement State will be approved if:

(a) The applicant satisfies the general requirements specified in § 30.33 of this chapter: *Provided, however,* That the requirements of § 30.33(a) (2) and (3) of this chapter do not apply to an application for a license to transfer byproduct material manufactured, processed, produced, packaged, or repackaged pursuant to a license issued by an Agreement State;

(b) The byproduct material is not contained in any food, beverage, cosmetic, drug, or other commodity designed for ingestion or inhalation by, or application to, a human being;

(c) The byproduct material is in the form of processed chemical elements, compounds, or mixtures, tissue samples, bioassay samples, counting standards, plated or encapsulated sources, or similar substances, identified as radioactive and to be used for its radioactive properties, but is not incorporated into any manufactured or assembled commodity, product, or device intended for commercial distribution; and

(d) The applicant submits copies of prototype labels and brochures and the Commission approves such labels and brochures.

[35 FR 6428, Apr. 22, 1970, as amended at 43 FR 6922, Feb. 17, 1978]

§ 32.19 Same: Conditions of licenses.

Each license issued under § 32.18 is subject to the following conditions:

(a) No more than 10 exempt quantities set forth in § 30.71, Schedule B of this chapter shall be sold or transferred in any single transaction. For purposes of this requirement, an individual exempt quantity may be composed of fractional parts of one or more of the exempt quantities in § 30.71, Schedule B of this chapter, provided that the sum of such fractions shall not exceed unity.

(b) Each quantity of byproduct material set forth in § 30.71, Schedule B of this chapter shall be separately and individually packaged. No more than 10 such packaged exempt quantities shall be contained in any outer package for transfer to persons exempt pursuant to § 30.18 of this chapter. The outer package shall be such that the dose rate at the external surface of the package does not exceed 0.5 millirem per hour.

(c) The immediate container of each quantity or separately packaged fractional quantity of byproduct material shall bear a durable, legible label which (1) identifies the radioisotope and the quantity of radioactivity, and (2) bears the words "Radioactive Material."

(d) In addition to the labeling information required by paragraph (c) of this section, the label affixed to the immediate container, or an accompanying brochure, shall also (1) state that the contents are exempt from NRC or Agreement State licensing requirements; (2) bear the words "Radioactive Material—Not for Human Use—Introduction Into Foods, Beverages, Cosmetics, Drugs, or Medicinals, or Into Products Manufactured for Commercial Distribution is Prohibited—Exempt Quantities Should Not be Combined"; and (3) set forth appropriate additional radiation safety precautions and instructions relating to the handling, use, storage, and disposal of the radioactive material.

[35 FR 6428, Apr. 22, 1970]

§ 32.20 Same: Records and material transfer reports.

(a) Each person licensed under § 32.18 of this part shall maintain records of transfer of material identifying, by name and address, each person to whom byproduct material is transferred for use under § 30.18 of this chapter or the equivalent regulations of an Agreement State and stating the kinds and quantities of byproduct material transferred. The licensee shall maintain the record of a transfer for a period of one year after the event is included in a summary report to the Commission.

(b) The licensee shall file a summary report stating the total quantity of each isotope transferred under the specific license with the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the appropriate NRC Regional Office listed in Appendix D of Part 20 of this chapter.

(c) The licensee shall file the summary report within 30 days following:

(1) Five years after filing the preceding report; or

(2) Filing an application for renewal of the license under § 30.37; or

(3) Notifying the Commission under § 30.34(f) of the licensee's decision to permanently discontinue activities authorized under the license issued under § 32.18.

(d) The report must cover the period between the filing of the preceding report and the occurrences specified in paragraph (c)(1), (2), or (3) of this section. If no transfers of byproduct material have been made under § 32.18 during the reporting period, the report must so indicate.

[48 FR 12333, Mar. 24, 1983]

§ 32.22 Self-luminous products containing tritium, krypton-85 or promethium-147: Requirements for license to manufacture, process, produce, or initially transfer.

(a) An application for a specific license to manufacture, process, or produce self-luminous products containing tritium, krypton-85, or promethium-147, or to initially transfer such products for use pursuant to § 30.19 of this chapter or equivalent regulations of an Agreement State, will be approved if:

(1) The applicant satisfies the general requirements specified in § 30.33 of this chapter: *Provided, however,* That the requirements of § 30.33(a) (2) and (3) do not apply to an application for a license to transfer tritium, krypton-85, or promethium-147 in self-luminous products manufactured, processed, or produced pursuant to a license issued by an Agreement State.

(2) The applicant submits sufficient information relating to the design, manufacture, prototype testing, quality control procedures, labeling or marking, and conditions of handling, storage, use, and disposal of the self-luminous product to demonstrate that the product will meet the safety criteria set forth in § 32.23. The information should include:

(i) A description of the product and its intended use or uses.

(ii) The type and quantity of byproduct material in each unit.

(iii) Chemical and physical form of the byproduct material in the product and changes in chemical and physical form that may occur during the useful life of the product.

(iv) Solubility in water and body fluids of the forms of the byproduct material identified in paragraphs (a)(2) (iii) and (xii) of this section.

(v) Details of construction and design of the product as related to containment and shielding of the byproduct material and other safety features under normal and severe conditions of handling, storage, use, and disposal of the product.

(vi) Maximum external radiation levels at 5 and 25 centimeters from any external surface of the product, averaged over an area not to exceed 10 square centimeters, and the method of measurement.

(vii) Degree of access of human beings to the product during normal handling and use.

(viii) Total quantity of byproduct material expected to be distributed in the product annually.

(ix) The expected useful life of the product.

(x) The proposed method of labeling or marking each unit with identification of the manufacturer or initial transferor of the product and the byproduct material in the product.

(xi) Procedures for prototype testing of the product to demonstrate the effectiveness of the containment, shielding, and other safety features under both normal and severe conditions of handling, storage, use, and disposal of the product.

(xii) Results of the prototype testing of the product, including any change in the form of the byproduct material contained in the product, the extent to which the byproduct material may be released to the environment, any increase in external radiation levels, and any other changes in safety features.

(xiii) The estimated external radiation doses and dose commitments relevant to the safety criteria in § 32.23 and the basis for such estimates.

(xiv) A determination that the probabilities with respect to the doses referred to in § 32.23(d) meet the criteria of that paragraph.

(xv) Quality control procedures to be followed in the fabrication of production lots of the product and the quality control standards the product will be required to meet.

(xvi) Any additional information, including experimental studies and tests, required by the Commission.

(b) Notwithstanding the provisions of paragraph (a) of this section, the Commission may deny an application for a specific license under this section if the end uses of the product cannot be reasonably foreseen.

[34 FR 9026, June 6, 1969, as amended at 43 FR 6923, Feb. 17, 1978]

§ 32.23 Same: Safety criteria.

An applicant for a license under § 32.22 shall demonstrate that the product is designed and will be manufactured so that:

(a) In normal use and disposal of a single exempt unit, it is unlikely that the external radiation dose in any one year, or the dose commitment resulting from the intake of radioactive material in any one year, to a suitable sample of the group of individuals expected to be most highly exposed to radiation or radioactive material from the product will exceed the dose to the appropriate organ as specified in Column I of the table in § 32.24 of this part.

(b) In normal handling and storage of the quantities of exempt units likely to accumulate in one location during marketing, distribution, installation, and servicing of the product, it is unlikely that the external radiation dose in any one year, or the dose commitment resulting from the intake of radioactive material in any one year, to a suitable sample of the group of individuals expected to be most highly exposed to radiation or radioactive material from the product will exceed the dose to the appropriate organ as specified in Column II of the table in § 32.24.

(c) It is unlikely that there will be a significant reduction in the effectiveness of the containment, shielding, or other safety features of the product from wear and abuse likely to occur in normal handling and use of the product during its useful life.

(d)[1] In use and disposal of a single exempt unit, or in handling and storage of the quantities of exempt units likely to accumulate in one location during marketing, distribution, installation, and servicing of the product, the probability is low that the containment, shielding, or other safety features of the product would fail under such circumstances that a person would receive an external radiation dose or dose commitment in excess of the dose to the appropriate organ as specified in Column III of the table in § 32.24, and the probability is negligible that a person would receive an external radiation dose or dose commitment in excess of the dose to the appropriate organ as specified in Column IV of the table in § 32.24.

[34 FR 9027, June 6, 1969]

§ 32.24 Same: Table of organ doses.

Part of body	Column I (rem)	Column II (rem)	Column III (rem)	Column IV (rem)
Whole body, head and trunk, active blood-forming organs, gonads, or lens of eye	0.001	0.01	0.5	15
Hands and forearms, feet and ankles, localized areas of skin averaged over areas no larger than 1 square centimeter	0.015	0.15	7.5	200
Other organs	0.003	0.03	1.5	50

[34 FR 9329, June 13, 1969]

§ 32.25 Conditions of licenses issued under § 32.22: Quality control, labeling, and reports of transfer.

Each person licensed under § 32.22 shall:

(a) Carry out adequate control procedures in the manufacture of the product to assure that each production lot meets the quality control standards approved by the Commission;

(b) Label or mark each unit so that the manufacturer, processor, producer, or initial transferor of the product and the byproduct material in the product can be identified; and

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[1] It is the intent of this paragraph that as the magnitude of the potential dose increases above that permitted under normal conditions, the probability that any individual will receive such a dose must decrease. The probabilities have been expressed in general terms to emphasize the approximate nature of the estimates which are to be made. The following values may be used as guides in estimating compliance with the criteria:

Low—not more than one such failure per year for each 10,000 exempt units distributed.

Negligible—not more than one such failure per year for each 1 million exempt units distributed.

(c) Maintain records and file reports with the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with copies to the appropriate NRC Regional Office listed in Appendix D of Part 20 of this chapter.

(1) The report must include the following information on products transferred to other persons for use under § 30.19 of this chapter or equivalent regulations of an Agreement State:

(i) A description or identification of the type of each product;

(ii) For each radionuclide in each type of product, the total quantity of the radionuclide; and

(iii) The number of units of each type of product transferred during the reporting period.

(2) The licensee shall file the report within 30 days following:

(i) Five years after filing the preceding report; or

(ii) Filing an application for renewal of the license under § 30.37; or

(iii) Notifying the Commission under § 30.34(f) of the licensee's decision to permanently discontinue activities authorized under the license issued under § 32.22.

(3) The report must cover the period between the filing of the preceding report and the occurrences specified in paragraphs (c)(2)(i), (ii), or (iii) of this section. If no transfers of byproduct material have been made under § 32.22 during the reporting period, the report must so indicate.

(4) The licensee shall maintain the record of a transfer for a period of one year after the event is included in a report to the Commission.

[34 FR 9027, June 6, 1969, as amended at 43 FR 6923, Feb. 17, 1978; 48 FR 12334, Mar. 24, 1983]

§ 32.26 Gas and aerosol detectors containing byproduct material: Requirements for license to manufacture, process, produce, or initially transfer.

An application for a specific license to manufacture, process, or produce gas and aerosol detectors containing byproduct material and designed to protect life or property from fires and airborne hazards, or to initially transfer such products for use pursuant to § 30.20 of this chapter or equivalent

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product annually;
(9) The expect
product;
(10) The propo
ing or marking

point—of—sale package to satisfy the requirements of § 32.29(b);

(11) Procedures for prototype testing of the product to demonstrate the effectiveness of the containment, shielding, and other safety features under both normal and severe conditions of handling, storage, use, and disposal of the product;

(12) Results of the prototype testing of the product, including any change in the form of the byproduct material contained in the product, the extent to which the byproduct material may be released to the environment, any increase in external radiation levels, and any other changes in safety features;

(13) The estimated external radiation doses and dose commitments relevant to the safety criteria in § 32.27 and the basis for such estimates;

(14) A determination that the probabilities with respect to the doses referred to in § 32.27(c) meet the criteria of that paragraph;

(15) Quality control procedures to be followed in the fabrication of production lots of the product and the quality control standards the product will be required to meet; and

(16) Any additional information, including experimental studies and tests, required by the Commission.

[34 FR 6653, Apr. 18, 1969, as amended at 43 FR 6923, Feb. 17, 1978; 45 FR 38342, June 9, 1980]

§ 32.27 Same: Safety criteria.

An applicant for a license under § 32.26 shall demonstrate that the product is designed and will be manufactured so that:

(a) In normal use and disposal of a single exempt unit, and in normal handling and storage of the quantities of exempt units likely to accumulate in one location during marketing, distribution, installation, and servicing of the product, it is unlikely that the external radiation dose in any one year, or the dose commitment resulting from the intake of radioactive material in any one year, to a suitable sample of the group of individuals expected to be most highly exposed to radiation or radioactive material from the product will exceed the dose to the appropriate organ as specified in Column I of the table in § 32.28.

(b) It is unlikely that there will be a significant reduction in the effectiveness of the containment, shielding, or other safety features of the product from wear and abuse likely to occur in normal handling and use of the product during its useful life.

(c) In use and disposal of a single exempt unit and in handling and storage of the quantities of exempt units likely to accumulate in one location during marketing, distribution, installation, and servicing of the product, the probability is low that the containment, shielding, or other safety features of the product would fail under such circumstances that a person would receive an external radiation dose or dose commitment in excess of the dose to the appropriate organ as specified in Column II of the table in § 32.28, and the probability is negligible that a person would receive an external radiation dose or dose commitment in excess of the dose to the appropriate organ as specified in Column III of the table in § 32.28.[1]

[34 FR 6654, Apr. 18, 1969]

§ 32.28 Same: Table of organ doses.

Part of body	Column I (rem)	Column II (rem)	Column III (rem)
Whole body, head and trunk, active blood-forming organs, gonads, or lens of eye	0.005	0.5	15

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[1] It is the intent of this paragraph that as the magnitude of the potential dose increases above that permitted under normal conditions, the probability that any individual will receive such a dose must decrease. The probabilities have been expressed in general terms to emphasize the approximate nature of the estimates which are to be made. The following values may be used as guides in estimating compliance with the criteria:

Low—not more than one such failure per year for each 10,000 exempt units distributed.

Negligible—not more than one such failure per year for each one million exempt units distributed.

Part of body	Column I (rem)	Column II (rem)	Column III (rem)
Hands and forearms; feet and ankles; localized areas of skin averaged over areas no larger than 1 square centimeter	0.075	7.5	200
Other organs	0.015	1.5	50

[34 FR 6654, Apr. 18, 1969]

§ 32.29 Conditions of licenses issued under § 32.26: Quality control, labeling, and reports of transfer.

Each person licensed under § 32.26 shall:

(a) Carry out adequate control procedures in the manufacture of the product to assure that each production lot meets the quality control standards approved by the Commission;

(b) Label or mark each detector and its point-of-sale package so that:

(1) Each detector has a durable, legible, readily visible label or marking on the external surface of the detector containing:

(i) The following statement: "CONTAINS RADIOACTIVE MATERIAL";

(ii) The name of the radionuclide and quantity of activity; and

(iii) An identification of the person licensed under § 32.26 to transfer the detector for use pursuant to § 30.20 of this chapter or equivalent regulations of an Agreement State.

(2) The labeling or marking specified in paragraph (b)(1) of this section is located where its will be readily visible when the detector is removed from its mounting.

(3) The external surface of the point-of-sale package has a legible, readily visible label or marking containing:

(i) The name of the radionuclide and quantity of activity;

(ii) An identification of the person licensed under § 32.26 to transfer the detector for use pursuant to § 30.20 of this chapter or equivalent regulations of an Agreement State; and

(iii) The following or a substantially similar statement:

THIS DETECTOR CONTAINS RADIOACTIVE MATERIAL AND HAS BEEN MANUFACTURED IN COMPLIANCE WITH U.S. NRC SAFETY CRITERIA IN 10 CFR 32.27. THE PURCHASER IS EXEMPT FROM ANY REGULATORY REQUIREMENTS.

(4) Each detector and point-of-sale package is provided with such other information as may be required by the Commission; and

(c) Maintain records and file a report with the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, with copies to the appropriate NRC Regional Office listed in Appendix D of Part 20 of this chapter.

(1) The report must include the following information on products transfered to other persons for use under § 30.20 of this chapter or equivalent regulations of an Agreement State:

(i) A description or identification of the type of each product;

(ii) For each radionuclide in each type of product, the total quantity of the radionuclide; and

(iii) The number of units of each type of product transferred during the reporting period.

(2) The licensee shall file the report within 30 days following:

(i) Five years after filing the preceding report; or

(ii) Filing an application for renewal of the license under § 30.37; or

(iii) Notifying the Commission under § 30.34(f) of the licensee's decision to permanently discontinue activities authorized pursuant to the license issued under § 32.26.

(3) The report must cover the period between the filing of the preceding report and the occurrences specified in paragraphs (c)(2) (i), (ii), or (iii) of this section. If no transfers of byproduct material have been made under § 32.26 during the reporting period, the report must so indicate.

(4) The licensee shall maintain the record of a transfer for a period of one year after the event is included in a report to the Commission.

[34 FR 6654, Apr. 18, 1969, as amended at 43 FR 6923, Feb. 17, 1978; 45 FR 38342, June 9, 1980; 48 FR 12334, Mar. 24, 1983]

32.40 Schedule A—prototype tests for automobile lock illuminators.

An applicant for a license pursuant › § 32.14 to install lock illuminators ito automobile locks, or to initially ransfer lock illuminators in automoile locks for use pursuant to § 30.15 of nis chapter shall conduct the followng prototype tests on each of five proptype devices, consisting of the autonobile lock with the installed illumiator in the following order:

(a) The device shall be subjected to 00 hours of accelerated weathering in suitable weathering machine which imulates the most severe conditions f normal use;

(b) The device shall be dropped upon concrete or iron surface in a 3-foot ree gravitational fall, or shall be subected to an equivalent treatment in a est device simulating such a fall. The drop test shall be repeated 100 times from random orientations;

(c) The device shall be attached to a vibratory fixture and vibrated at a rate of not less than 26 cycles per second and a vibration acceleration of not less than 2 G for a period of not less than 1 hour;

(d) On completion of the foregoing tests, the device shall be immersed in 30 inches of water for 24 hours and shall show no visible evidence of water entry into the lock illuminator. Absolute pressure of the air above the water shall then be reduced to 1 inch of mercury. Lowered pressure shall be maintained for 1 minute or until air bubbles cease to be given off by the water, whichever is the longer. Pressure shall then be increased to normal atmospheric pressure. Any evidence of bubbles emanating from within the lock illuminator, or water entering the lock illuminator, shall be considered leakage;

(e) After each of the tests prescribed by this section, each device shall be examined for evidence of physical damage and for loss of tritium or promethium-147. Any evidence of damage to or failure of any device which could affect the containment of the tritium or promethium-147 in such devices shall be cause for rejection of the design on which such prototype devices were constructed or manufactured if the damage or failure is attributable to design defect. Loss of tritium or promethium-147 from each tested device shall be measured both by sampling the immersion test water used in paragraph (d) of this section and by wiping with filter paper the entire accessible area of the lock illuminator. Measurements of tritium or promethium-147 shall be made in an apparatus calibrated to measure tritium or promethium-147, as appropriate. If more than 0.1 percent of the original amount of tritium or promethium-147 in the device is found in the immersion test water of the test in paragraph (d) of this section, or if more than 2,200 disintegrations per minute of tritium or promethium-147 on the filter paper is measured after any of the tests in paragraphs (a) to (d) of this section the device shall be rejected.

[30 FR 8192, June 26, 1965, as amended at 31 FR 5317, Apr. 2, 1966; 43 FR 6923, Feb. 17, 1978]

Subpart B—Generally Licensed Items

§ 32.51 Byproduct material contained in devices for use under § 31.5; requirements for license to manufacture, or initially transfer.

(a) An application for a specific license to manufacture, or initially transfer devices containing byproduct material to persons generally licensed under § 31.5 of this chapter or equivalent regulations of an Agreement State will be approved if:

(1) The applicant satisfies the general requirements of § 30.33 of this chapter;

(2) The applicant submits sufficient information relating to the design, manufacture, prototype testing, quality control, labels, proposed uses, installation, servicing, leak testing, operating and safety instructions, and potential hazards of the device to provide reasonable assurance that:

(i) The device can be safely operated by persons not having training in radiological protection;

(ii) Under ordinary conditions of handling, storage and use of the device, the byproduct material contained in the device will not be released or inadvertently removed from the device, and it is unlikely that any person will receive in any period of one calendar quarter a dose in excess of 10 percent of the limits specified in the table in § 20.101(a) of this chapter; and

(iii) Under accident conditions (such as fire and explosion) associated with handling, storage and use of the device, it is unlikely that any person would receive an external radiation dose or dose commitment in excess of the dose to the appropriate organ as specified in Column IV of the table in § 32.24.

(3) Each device bears a durable, legible, clearly visible label or labels approved by the Commission which contain in a clearly identified and separate statement:

(i) Instructions and precautions necessary to assure safe installation, operation, and servicing of the device (documents such as operating and service manuals may be identified in the label and used to provide this information);

(ii) The requirements, or lack of requirement, for leak testing, or for testing any on-off mechanism and indicator, including the maximum time interval for such testing, and the identification of radioactive material by isotope, quantity of radioactivity, and date of determination of the quantity; and

(iii) The information called for in the following statement in the same or substantially similar form: [1]

The receipt, possession, use, and transfer of this device Model ———[1], Serial No. ———[2], are subject to a general license or the equivalent and the regulations of the U.S. NRC or of a State with which the NRC has entered into an agreement for the exercise of regulatory authority. This label shall be maintained on the device in a legible condition. Removal of this label is prohibited.

CAUTION—RADIOACTIVE MATERIAL

(Name of manufacturer, or initial transferor)[1] ————————

(b) In the event the applicant desires that the device be required to be tested at intervals longer than six months, either for proper operation of the on-off mechanism and indicator, if any, or for leakage of radioactive material or for both, he shall include in this application sufficient information to demonstrate that such longer interval is justified by performance characteristics of the device or similar devices, and by design features which have a significant bearing on the probability or consequences of leakage of radioactive material from the device or failure of the on-off mechanism and indicator. In determining the acceptable interval for the test for leakage of radioactive material, the Commission will consider information which includes, but is not limited to:

(1) Primary containment (source capsule);

(2) Protection of primary containment;

(3) Method of sealing containment;

(4) Containment construction materials;

(5) Form of contained radioactive material;

(6) Maximum temperature withstood during prototype tests;

(7) Maximum pressure withstood during prototype tests;

(8) Maximum quantity of contained radioactive material;

(9) Radiotoxicity of contained radioactive material; and

(10) Operating experience with identical devices or similarly designed and constructed devices.

(c) In the event the applicant desires that the general licensee under § 31.5 of this chapter, or under equivalent regulations of an Agreement State, be authorized to install the device, collect the sample to be analyzed by a specific licensee for leakage of radioactive material, service the device, test the on-off mechanism and indicator, or remove the device from installation, he shall include in his application written instructions to be followed by the general licensee, estimated calendar quarter doses associated with such activity or activities and the bases for such estimates. The submitted information shall demonstrate that performance of such activity or activities by an individual untrained in radiological protection, in addition to other handling, storage, and use of devices under the general license, is unlikely to cause that individual to receive a calendar quarter dose in excess of 10 percent of the limits specified in the table in § 20.101 (a) of this chapter.

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[1] Devices licensed under § 32.51 prior to January 19, 1975 may bear labels authorized by the regulations in effect on January 1, 1975.

[2] The model, serial number, and the name of the manufacturer, or initial transferor may be omitted from this label provided the information is elsewhere specified in labeling affixed to the device.

[39 FR 43533, Dec. 16, 1974, as amended at 40 FR 8785, Mar. 3, 1975; 42 FR 25721, May 19, 1977; 43 FR 6923, Feb. 17, 1978]

§ 32.51a Same: Conditions of licenses.

Each person licensed under § 32.51 shall:

(a) Furnish a copy of the general license contained in § 31.5 of this chapter to each person to whom he directly or through an intermediate person transfers byproduct material in a device for use pursuant to the general license contained in § 31.5 of this chapter.

(b) Furnish a copy of the general license contained in the Agreement State's regulation equivalent to § 31.5 of this chapter, or alternatively, furnish a copy of the general license contained in § 31.5 of this chapter, to each person to whom he directly or through an intermediate person transfers byproduct material in a device for use pursuant to the general license of an Agreement State. If a copy of the general license in § 31.5 of this chapter is furnished to such person, it shall be accompanied by a note explaining that use of the device is regulated by the Agreement State under requirements substantially the same as those in § 31.5 of this chapter.

[39 FR 43533, Dec. 16, 1974]

§ 32.52 Same: Material transfer reports and records.

Each person licensed under § 32.51 to initially transfer devices to generally licensed persons shall:

(a) Report to the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the appropriate NRC Regional Office listed in Appendix D of Part 20 of this chapter, all transfers of such devices to persons for use under the general license in § 31.5 of this chapter. Such report shall identify each general licensee by name and address, an individual by name and/or position who may constitute a point of contract between the Commission and the general licensee, the type and model number of device transferred, and the quantity and type of byproduct material contained in the device. If one or more intermediate persons will temporarily possess the device at the intended place of use prior to its possession by the user, the report shall include identification of each intermediate person by name, address, contact, and relationship to the intended user. If no transfers have been made to persons generally licensed under § 31.5 of this chapter during the reporting period, the report shall so indicate. The report shall cover each calendar quarter and shall be filed within 30 days thereafter. The first report to be filed pursuant to this paragraph as revised and effective on January 15, 1975, shall cover the first calendar quarter in 1975. The report, if any, required for the fourth calendar quarter in 1974 shall be filed pursuant to the requirements of this paragraph in effect on January 14, 1975.

(b) Report to the responsible Agreement State agency all transfers of such devices to persons for use under a general license in an Agreement State's regulation equivalent to § 31.5 of this chapter. Such report shall identify each general licensee by name and address, an individual by name and/or position who may constitute a point of contact between the agency and the general licensee, the type and model number of device transferred, and the quantity and type of byproduct material contained in the device. If one or more intermediate persons will temporarily possess the device at the intended place of use prior to its possession by the user, the report shall include identification of each intermediate person by name, address, contact, and relationship to the intended user. The report shall be submitted within 30 days after the end of each calendar quarter in which such a device is transferred to the generally licensed person. If no transfers have been made to a particular Agreement State during the reporting period, this information shall be reported to the responsible Agreement State agency upon request of the agency. The first report, if any, to be filed pursuant to this paragraph as revised and effective on January 15, 1975, shall cover the first calendar quarter in 1975.

(c) Keep records showing the name, address, and a point of contact for each general licensee to whom he directly or through an intermediate person transfers byproduct material in devices for use pursuant to the general license provided in § 31.5 of this chapter or equivalent regulations of an Agreement State. The records shall show the date of each transfer, the isotope and quantity of radioactivity in each device transferred, the identity of any intermediate person, and compliance with the report requirements of this section. The records required by this paragraph shall be maintained for a period of five years from the date of the recorded event.

[39 FR 43533, Dec. 16, 1974, as amended at 41 FR 16446, Apr. 19, 1976; 41 FR 18302, May 3, 1976; 43 FR 6923, Feb. 17, 1978]

§ 32.53 Luminous safety devices for use in aircraft: Requirements for license to manufacture, assemble, repair or initially transfer.

An application for a specific license to manufacture, assemble, repair or initially transfer luminous safety devices containing tritium or promethium-147 for use in aircraft, for distribution to persons generally licensed under § 31.7 of this chapter, will be approved if:

(a) The applicant satisfies the general requirements specified in § 30.33 of this chapter;

(b) The applicant submits sufficient information regarding each device pertinent to evaluation of the potential radiation exposure, including:

(1) Chemical and physical form and maximum quantity of tritium or promethium-147 in each device;

(2) Details of construction and design;

(3) Details of the method of binding or containing the tritium or promethium-147;

(4) Procedures for and results of prototype testing to demonstrate that the tritium or promethium-147 will not be released to the environment under the most severe conditions likely to be encountered in normal use;

(5) Any quality control procedures proposed as alternatives to those prescribed by § 32.55;

(6) Any additional information, including experimental studies and tests, required by the Commission to facilitate a determination of the safety of the device.

(c) Each device will contain no more than 10 curies of tritium or 300 millicuries of promethium-147. The levels of radiation from each device containing promethium-147 will not exceed 0.5 millirad per hour at 10 centimeters from any surface when measured through 50 milligrams per square centimeter of absorber.

(d) The Commission determines that:

(1) The method of incorporation and binding of the tritium or promethium-147 in the device is such that the tritium or promethium-147 will not be released under the most severe conditions which are likely to be encountered in normal use and handling of the device;

(2) The tritium or promethium-147 is incorporated or enclosed so as to preclude direct physical contact by any person with it;

(3) The device is so designed that it cannot easily be disassembled; and

(4) The device has been subjected to and has satisfactorily passed the prototype tests prescribed by § 32.101, Schedule B, of this part.

[30 FR 8192, June 26, 1965, as amended at 33 FR 6463, Apr. 27, 1968; 43 FR 6923, Feb. 17, 1978]

§ 32.54 Same: Labeling of devices.

(a) A person licensed under § 32.53 to manufacture, assemble, or initially transfer devices containing tritium or promethium-147 for distribution to persons generally licensed under § 31.7 of this chapter shall, except as provided in paragraph (b) of this section, affix to each device a label containing the radiation symbol prescribed by § 20.203(a) of this chapter, such other information as may be required by the Commission including disposal instructions when appropriate, and the following or a substantially similar statement which contains the information called for in the following statement:[1]

The receipt, possession, use, and transfer of this device, Model* ————, Serial No.* ——, containing ———— (Identity and quantity of radioactive material) are subject to a general license or the equivalent and the regulations of the U.S. NRC or of a State with which the NRC has entered into an agreement for the exercise of regulatory authority. Do not remove this label.

CAUTION—RADIOACTIVE MATERIAL

————————————————

(Name of manufacturer, assembler, or initial transferor.)*

*The model, serial number, and name of manufacturer, assembler, or initial transferor may be omitted from this label provided they are elsewhere specified in labeling affixed to the device.

(b) If the Commission determines that it is not feasible to affix a label to the device containing all the information called for in paragraph (a) of this section, it may waive the requirements of that paragraph and require in lieu thereof that:

(1) A label be affixed to the device identifying:

(i) The manufacturer, assembler, or initial transferor; and

(ii) The type of radioactive material; and

(2) A leaflet bearing the following information be enclosed in or accompany the container in which the device is shipped:

(i) The name of the manufacturer, assembler, or initial transferor,

(ii) The type and quantity of radioactive material,

(iii) The model number,

(iv) A statement that the receipt, possession, use, and transfer of the device are subject to a general license or the equivalent and the regulations of the U.S. NRC or of an Agreement State, and

(v) Such other information as may be required by the Commission, including disposal instructions when appropriate.

[33 FR 16331, Nov. 7, 1968, as amended at 40 FR 8785, Mar. 3, 1975; 43 FR 6923, Feb. 17, 1978]

§ 32.55 Same: Quality assurance; prohibition of transfer.

(a) Each person licensed under § 32.53 shall visually inspect each device and shall reject any which has an observable physical defect that could affect containment of the tritium or promethium-147.

(b) Each person licensed under § 32.53 shall take a random sample of the size required by the table in § 32.110 for Lot Tolerance Percent Defective of 5.0 percent from each inspection lot, and shall subject each unit in the sample to the following tests:

(1) Each device shall be immersed in 30 inches of water for 24 hours and shall show no visible evidence of water entry. Absolute pressure of the air above the water shall then be reduced to 1 inch of mercury. Lowered pressure shall be maintained for 1 minute or until air bubbles cease to be given off by the water, whichever is the longer. Pressure shall then be increased to normal atmospheric pressure. Any device which leaks as evidenced by bubbles emanating from within the device, or water entering the device, shall be considered as a defective unit.

(2) The immersion test water from the preceding test in paragraph (b)(1) of this section shall be measured for tritium or promethium-147 content by an apparatus that has been calibrated to measure tritium or promethium-147, as appropriate. If more than 0.1 percent of the original amount of tritium or promethium-147 in any device is found to have leaked into the immersion test water, the leaking device shall be considered as a defective unit.

(3) The levels of radiation from each device containing promethium-147 shall be measured. Any device which has a radiation level in excess of 0.5 millirad per hour at 10 centimeters from any surface when measured

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[1] Devices licensed under § 32.53 prior to January 19, 1975 may bear labels authorized by the regulations in effect on January 1, 1975.

through 50 milligrams per square centimeter of absorber, shall be considered as a defective unit.

(c) An application for a license or for amendment of a license may include a description of procedures proposed as alternatives to those prescribed by paragraph (b) of this section, and proposed criteria for acceptance under those procedures. The Commission will approve the proposed alternative procedures if the applicant demonstrates that:

(1) They will consider defective any sampled device which has a leakage rate exceeding 0.1 percent of the original quantity of tritium or promethium 147 in any 24-hour period; and

(2) The operating characteristic curve or confidence interval estimate for the alternative procedures provides a Lot Tolerance Percent Defective of 5.0 percent at the consumer's risk of 0.10.

(d) No person licensed under § 32.53 shall transfer to persons generally licensed under § 31.7 of this chapter:

(1) Any luminous safety device which has been tested and found defective under the criteria and procedures specified in this section, unless the defective units have been repaired or reworked and have then met the tests set out in paragraph (b) of this section; or

(2) Any inspection lot which has been rejected as a result of the procedures in § 32.110 or alternative procedures in paragraph (c) of this section, unless the defective units have been sorted and removed or have been repaired or reworked and have then met the tests set out in paragraph (b) of this section.

[30 FR 8192, June 26, 1965, as amended at 39 FR 22129, June 20, 1974; 39 FR 26397, July 19, 1974]

§ 32.56 Same: Material transfer reports.

Each person licensed under § 32.53 shall file an annual report with the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the appropriate NRC Regional Office listed in Appendix D of Part 20 of this chapter, which shall state the total quantity of tritium or promethium-147 transferred to persons generally licensed under § 31.7 of this chapter. The report shall identify each general licensee by name, state the kinds and numbers of liminous devices transferred, and specify the quantity of tritium or promethium-147 in each kind of device. Each report shall cover the year ending June 30 and shall be filed within thirty (30) days thereafter.

[30 FR 8192, June 26, 1965, as amended at 38 FR 1271, Jan. 11, 1973; 41 FR 16446, Apr. 19, 1976]

§ 32.57 Calibration or reference sources containing americium-241: Requirements for license to manufacture or initially transfer.

An application for a specific license to manufacture or initially transfer calibration or reference sources containing americium-241, for distribution to persons generally licensed under § 31.8 of this chapter, will be approved if:

(a) The applicant satisfies the general requirements of § 30.33 of this chapter;

(b) The applicant submits sufficient information regarding each type of calibration or reference source pertinent to evaluation of the potential radiation exposure, including:

(1) Chemical and physical form and maximum quantity of americium 241 in the source;

(2) Details of construction and design;

(3) Details of the method of incorporation and binding of the americium-241 in the source;

(4) Procedures for and results of prototype testing of sources, which are designed to contain more than 0.005 microcurie of americium-241, to demonstrate that the americium-241 contained in each source will not be released or be removed from the source under normal conditions of use;

(5) Details of quality control procedures to be followed in manufacture of the source;

(6) Description of labeling to be affixed to the source or the storage container for the source;

(7) Any additional information, including experimental studies and tests, required by the Commission to facili-

tate a determination of the safety of the source.

(c) Each source will contain no more than 5 microcuries of americium-241.

(d) The Commission determines, with respect to any type of source containing more than 0.005 microcurie of americium-241, that:

(1) The method of incorporation and binding of the americium-241 in the source is such that the americium-241 will not be released or be removed from the source under normal conditions of use and handling of the source; and

(2) The source has been subjected to and has satisfactorily passed the prototype tests prescribed by § 32.102, Schedule C, of this part.

[30 FR 8192, June 26, 1965, as amended at 43 FR 6923, Feb. 17, 1978]

§ 32.58 Same: Labeling of devices.

Each person licensed under § 32.57 shall affix to each source, or storage container for the source, a label which shall contain sufficient information relative to safe use and storage of the source and shall include the following statement or a substantially similar statement which contains the information called for in the following statement:[1]

> The receipt, possession, use and transfer of this source, Model ———, Serial No. ———, are subject to a general license and the regulations of the United States Nuclear Regulatory Commission or of a State with which the Commission has entered into an agreement for the exercise of regulatory authority. Do not remove this label.
>
> CAUTION—RADIOACTIVE MATERIAL—THIS SOURCE CONTAINS AMERICIUM 241. DO NOT TOUCH RADIOACTIVE PORTION OF THIS SOURCE.
>
> ————————————————————
>
> (Name of manufacturer or initial transferor)

(Sec. 161, as amended, Pub. L. 83-703, 68 Stat. 948 (42 U.S.C. 2201); sec. 201, as amended, Pub. L. 93-438, 88 Stat. 1243 (42 U.S.C. 5841))

[30 FR 8192, June 26, 1965, as amended at 40 FR 8786, Mar. 3, 1975; 43 FR 6923, Feb. 17, 1978]

§ 32.59 Same: Leak testing of each source.

Each person licensed under § 32.57 shall perform a dry wipe test upon each source containing more than 0.1 microcurie of americium-241 prior to transferring the source to a general licensee under § 31.8 of this chapter. This test shall be performed by wiping the entire radioactive surface of the source with a filter paper with the application of moderate finger pressure. The radioactivity on the paper shall be measured by using radiation detection instrumentation capable of detecting 0.005 microcurie of americium-241. If any such test discloses more than 0.005 microcurie of radioactive material, the source shall be deemed to be leaking or losing americium-241 and shall not be transferred to a general licensee under § 31.8 of this chapter.

[30 FR 8192, June 26, 1965]

§ 32.60 [Reserved]

§ 32.61 Ice detection devices containing strontium-90; requirements for license to manufacture or initially transfer.

An application for a specific license to manufacture or initially transfer ice detection devices containing strontium-90 for distribution to persons generally licensed under § 31.10 of this chapter will be approved if:

(a) The applicant satisfies the general requirements specified in § 30.33 of this chapter;

(b) The applicant submits sufficient information regarding each type of device pertinent to evaluation of the potential radiation exposure, including:

(1) Chemical and physical form and maximum quantity of strontium-90 in the device;

(2) Details of construction and design of the source of radiation and its shielding;

(3) Radiation profile of a prototype device;

(4) Procedures for and results of prototype testing of devices to demonstrate that the strontium-90 contained

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[1] Sources licensed under § 32.57 prior to January 19, 1975 may bear labels authorized by the regulations in effect on January 1, 1975.

in each device will not be released or be removed from the device under the most severe conditions likely to be encountered in normal handling and use;

(5) Details of quality control procedures to be followed in manufacture of the device;

(6) Description of labeling to be affixed to the device;

(7) Instructions for handling and installation of the device;

(8) Any additional information, including experimental studies and tests, required by the Commission to facilitate a determination of the safety of the device;

(c) Each device will contain no more than 50 microcuries of strontium-90 in an insoluble form;

(d) Each device will bear durable, legible labeling which includes the radiation caution symbol prescribed by § 20.203(a) of this chapter, a statement that the device contains strontium-90 and the quantity thereof, instructions for disposal and statements that the device may be possessed pursuant to a general license, that the manufacturer or civil authorities should be notified if the device is found, that removal of the labeling is prohibited and that disassembly and repair of the device may be performed only by a person holding a specific license to manufacture or service such devices;

(e) The Commission determines that:

(1) The method of incorporation and binding of the strontium-90 in the device is such that the strontium-90 will not be released from the device under the most severe conditions which are likely to be encountered in normal use and handling of the device;

(2) The strontium-90 is incorporated or enclosed so as to preclude direct physical contact by any individual with it and is shielded so that no individual will receive a radiation exposure to a major portion of his body in excess of 0.5 rem in a year under ordinary circumstances of use;

(3) The device is so designed that it cannot be easily disassembled;

(4) The device has been subjected to and has satisfactorily passed the prototype tests prescribed by § 32.103; and

(5) Quality control procedures have been established to satisfy the requirements of § 32.62.

[30 FR 9905, Aug. 10, 1965, as amended at 43 FR 6923, Feb. 17, 1978]

§ 32.62 Same: Quality assurance; prohibition of transfer.

(a) Each person licensed under § 32.61 shall visually inspect each device and shall reject any which has an observable physical defect that could affect containment of the strontium-90.

(b) Each person licensed under § 32.61 shall test each device for possible loss of strontium-90 or for contamination by wiping with filter paper an area of at least 100 square centimeters on the outside surface of the device, or by wiping the entire surface area if it is less than 100 square centimeters. The detection on the filter paper of more than 2,200 disintegrations per minute of radioactive material per 100 square centimeters of surface wiped shall be cause for rejection of the tested device.

(c) Each person licensed under § 32.61 shall take a random sample of the size required by the table in § 32.110 for Lot Tolerance Percent Defective of 5.0 percent from each inspection lot, and shall subject each unit in the sample to the following tests:

(1) Each device shall be immersed in 30 inches of water for 24 hours and shall show no visible evidence of physical contact between the water and the strontium-90. Absolute pressure of the air above the water shall then be reduced to 1 inch of mercury. Lowered pressure shall be maintained for 1 minute or until air bubbles cease to be given off by the water, whichever is the longer. Pressure shall then be increased to normal atmospheric pressure. Any device which leaks, as evidenced by physical contact between the water and the strontium-90, shall be considered as a defective unit.

(2) The immersion test water from the preceding test in paragraph (c)(1) of this section shall be measured for radioactive material. If the amount of radioactive material in the immersion test water is greater than 0.1 percent

of the original amount of strontium-90 in any device, the device shall be considered as a defective unit.

(d) An application for a license or for amendment of a license may include a description of procedures proposed as alternatives to those prescribed by paragraph (c) of this section, and proposed criteria for acceptance under those procedures. The Commission will approve the proposed alternative procedures if the applicant demonstrates that:

(1) They will consider defective any sampled device which has a leakage rate exceeding 0.1 percent of the original quantity of strontium-90 in any 24-hour period; and

(2) The operating characteristic curve or confidence interval estimate for the alternative procedures provides a Lot Tolerance Percent Defective of 5.0 percent at the consumer's risk of 0.10.

(e) No person licensed under § 32.61 shall transfer to persons generally licensed under § 31.10 of this chapter:

(1) Any device which has been tested and found defective under the criteria and procedures specified in this § 32.62 unless the defective units have been repaired or reworked and then met the tests set out in paragraph (c) of this section; or

(2) Any inspection lot which has been rejected as a result of the procedures in § 32.110 or alternative procedures in paragraph (d) of this section, unless the defective units have been sorted and removed or have been repaired or reworked and have then met the tests set out in paragraph (c) of this section.

[30 FR 9905, Aug. 10, 1965, as amended at 39 FR 22130, June 20, 1974; 39 FR 26397, July 19, 1974; 43 FR 6923, Feb. 17, 1978]

§ 32.71 Manufacture and distribution of byproduct material for certain in vitro clinical or laboratory testing under general license.

An application for a specific license to manufacturer or distribute byproduct material for use under the general license of § 31.11 of this chapter will be approved if:

(a) The applicant satisfies the general requirements specified in § 30.33 of this chapter.

(b) The byproduct material is to be prepared for distribution in prepackaged units of:

(1) Iodine-125 in units not exceeding 10 microcuries each.

(2) Iodine-131 in units not exceeding 10 microcuries each.

(3) Carbon-14 in units not exceeding 10 microcuries each.

(4) Hydrogen-3 (tritium) in units not exceeding 50 microcuries each.

(5) Iron-59 in units not exceeding 20 microcuries each.

(6) Selenium-75 in units not exceeding 10 microcuries each.

(7) Mock Iodine-125 in units not exceeding 0.05 microcurie of iodine-129 and 0.005 microcurie of americium-241 each.

(c) Each prepackaged unit bears a durable, clearly visible label:

(1) Identifying the radioactive contents as to chemical form and radionuclide, and indicating that the amount of radioactivity does not exceed 10 microcuries of iodine-131, iodine-125, selenium-75, or carbon-14; 50 microcuries of hydrogen-3 (tritium); or 20 microcuries of iron-59; or Mock Iodine-125 in units not exceeding 0.05 microcurie of iodine-129 and 0.005 microcurie of americium-241 each; and

(2) Displaying the radiation caution symbol described in § 20.203(a)(1) of this chapter and the words, "Caution, Radioactive Material", and "Not for Internal or External Use in Humans or Animals."

(d) The following statement, or a substantially similar statement which contains the information called for in the following statement, appears on a label affixed to each prepackaged unit or appears in a leaflet or brochure which accompanies the package: [1]

> The radioactive material may be received, acquired, possessed; and used only by physicians, veterinarians in the practice of veterinary medicine, clinical laboratories or hospitals and only for in vitro clinical or laboratory tests not involving internal or external administration of the material, or the radiation therefrom, to human beings or animals. Its receipt, acquisition, possession, use, and transfer are subject to the regulations

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[1] Labels authorized by the regulations in effect on September 26, 1979, may be used until one year from September 27, 1979.

and a general license of the U.S. Nuclear Regulatory Commission or of a State with which the Commission has entered into an agreement for the exercise of regulatory authority.

____

(Name of Manufacturer)

(e) The label affixed to the unit, or the leaflet or brochure which accompanies the package, contains adequate information as to the precautions to be observed in handling and storing such byproduct material. In the case of the Mock Iodine-125 reference or calibration source, the information accompanying the source must also contain directions to the licensee regarding the waste disposal requirements set out in § 20.301 of Part 20 of this chapter.

[33 FR 16553, Nov. 14, 1968, as amended at 38 FR 34110, Dec. 11, 1973; 39 FR 26148, July 17, 1974; 40 FR 8786, Mar. 3, 1975; 42 FR 21604, Apr. 28, 1977; 42 FR 26987, May 26, 1977; 44 FR 50325, Aug. 28, 1979]

§ 32.72 Manufacture and distribution of radiopharmaceuticals containing byproduct material for medical use under Part 35.

(a) An application for a specific license to manufacture and distribute radiopharmaceuticals containing byproduct material for use by persons authorized pursuant to Part 35 of this chapter will be approved if:

(1) The applicant satisfies the general requirements specified in § 30.33 of this chapter;

(2) The applicant submits evidence that:

(i) The radiopharmaceutical containing byproduct material will be manufactured, labeled, and packaged in accordance with the Federal Food, Drug and Cosmetic Act or the Public Health Service Act, such as a new drug application (NDA) approved by the Food and Drug Administration (FDA), a biologic product license issued by FDA, or a "Notice of Claimed Investigational Exemption for a New Drug" (IND) accepted by FDA; or

(ii) The manufacture and distribution of the radiopharmaceutical containing byproduct material is not subject to the Federal Food, Drug, and Cosmetic Act and the Public Health Service Act;

(3) The applicant submits information on the radionuclide, chemical and physical form, packaging including maximum activity per package, and shielding provided by the packaging of the byproduct material that is appropriate for safe handling and storage of radiopharmaceuticals by group licensees; and

(4)(i) The label affixed to each package of the radiopharmaceutical contains information on the radionuclide, quantity, and date of assay, and the label, or the leaflet or brochure that accompanies each package, contains a statement that the U.S. Nuclear Regulatory Commission has approved distribution of the radiopharmaceutical to persons licensed to use byproduct material listed in §§ 35.100, 35.200, or 35.300, as appropriate, and to persons who hold an equivalent license issued by an Agreement State. However, labels worded in accordance with requirements that were in place on March 30, 1987 may be used until March 30, 1989.

(ii) The labels, leaflets or brochures required by this paragraph are in addition to the labeling required by the Food and Drug Administration (FDA) and they may be separate from or, with the approval of FDA, may be combined with the labeling required by FDA.

(b) If an application is filed pursuant to paragraph (a) of this section on or before October 15, 1974, for a license to manufacturer and distribute a radiopharmaceutical that was distributed commercially on or before August 16, 1974, the applicant may continue the distribution of such radiopharmaceutical to group licensees until the Commission issues the license or notifies the applicant otherwise.

[39 FR 26148, July 17, 1974, as amended at 51 FR 36967, Oct. 16, 1986]

§ 32.73 Manufacture and distribution of generators or reagent kits for preparation of radiopharmaceuticals containing byproduct material.

(a) An application for a specific license to manufacture and distribute generators or reagent kits containing byproduct material for preparation of radiopharmaceuticals by persons licensed pursuant to § 35.14 of this chapter for the uses listed in Group III of Schedule A, § 35.100 of this chapter will be approved if (See Note 1):

(1) The applicant satisfies the general requirements specified in § 30.33 of this chapter;

(2) The applicant submits evidence that:

(i) The generator or reagent kit is to be manufactured, labeled, and packaged in accordance with the Federal Food, Drug, and Cosmetic Act or the Public Health Service Act, such as new drug application (NDA) approved by the Food and Drug Administration (FDA), a biologic product license issued by FDA, or a "Notice of Claimed Investigational Exemption for a New Drug" (IND) accepted by FDA; or

(ii) The manufacture and distribution of the generator or reagent kit are not subject to the Federal Food, Drug, and Cosmetic Act and the Public Health Service Act.

NOTE 1: Although the Commission does not regulate the manufacture and distribution of reagent kits that do not contain byproduct material, it does regulate the use of such reagent kits for the preparation of radiopharmaceuticals containing byproduct material as part of its licensing and regulation of the users of byproduct material. Any manufacturer of reagent kits that do not contain byproduct material who desires to have his reagent kits approved by the Commission for use by persons licensed pursuant to § 35.14 and Group III of Schedule A, § 35.100 of this chapter may submit the pertinent information specified in this § 32.73.

(3) The applicant submits information on the radionuclide, chemical and physical form, packaging including maximum activity per package, and shielding provided by the packaging of the byproduct material contained in the generator or reagent kit;

(4) The label affixed to the generator or reagent kit contains information on the radionuclide, quantity, and date of assay; and

(5) The label affixed to the generator or reagent kit, or the leaflet or brochure which accompanies the generator or reagent kit, contains:

(i) Adequate information, from a radiation safety standpoint, on the procedures to be followed and the equipment and shielding to be used in eluting the generator or processing radioactive material with the reagent kit, and

(ii) A statement that this generator or reagent kit (as appropriate) is approved for distribution to persons licensed by the U.S. Nuclear Regulatory Commission to use byproduct material identified in § 35.200 or under an equivalent license of an Agreement State. However, labels worded in accordance with requirements that were in place on March 30, 1987 may be used until March 30, 1989.

The labels, leaflets or brochures required by this paragraph are in addition to the labeling required by FDA and they may be separate from or, with the approval of FDA, may be combined with the labeling required by FDA.

(b) If an application is filed pursuant to paragraph (a) of this section on or before October 15, 1974, for a license to manufacture and distribute a generator or reagent kit that was distributed commercially on or before August 16, 1974, the applicant may continue the distribution of such generator or reagent kit until the Commission issues the license or notifies the applicant otherwise.

[39 FR 26148, July 17, 1974, as amended at 51 FR 36967, Oct. 16, 1986]

§ 32.74 Manufacture and distribution of sources or devices containing byproduct material for medical use.

(a) An application for a specific license to manufacture and distribute sources and devices containing byproduct material to persons licensed pursuant to Part 35 of this chapter for use as a calibration or reference source or for the uses listed in §§ 35.400 and 35.500 of this chapter will be approved if:

(1) The applicant satisfies the general requirements in § 30.33 of this chapter;

(2) The applicant submits sufficient information regarding each type of source or device pertinent to an evaluation of its radiation safety, including:

(i) The byproduct material contained, its chemical and physical form, and amount;

(ii) Details of design and construction of the source or device;

(iii) Procedures for, and results of, prototype tests to demonstrate that the source or device will maintain its integrity under stresses likely to be encountered in normal use and accidents;

(iv) For devices containing byproduct material, the radiation profile of a prototype device;

(v) Details of quality control procedures to assure that production sources and devices meet the standards of the design and prototype tests;

(vi) Procedures and standards for calibrating sources and devices;

(vii) Legend and methods for labeling sources and devices as to their radioactive content;

(viii) Instructions for handling and storing the source or device from the radiation safety standpoint; these instructions are to be included on a durable label attached to the source or device or attached to a permanent storage container for the source or device: *Provided*, That instructions which are too lengthy for such label may be summarized on the label and printed in detail on a brochure which is referenced on the label;

(3) The label affixed to the source or device, or to the permanent storage container for the source or device, contains information on the radionuclide, quantity and date of assay, and a statement that the U.S. Nuclear Regulatory Commission has approved distribution of the (name of source or device) to persons licensed to use byproduct material identified in §§ 35.58, 35.400, or 35.500, as appropriate, and to persons who hold an equivalent license issued by an Agreement State. However, labels worded in accordance with requirements that were in place on March 30, 1987 may be used until March 30, 1989.

(b)(1) In the event the applicant desires that the source or device be required to be tested for leakage of radioactive material at intervals longer than six months, he shall include in his application sufficient information to demonstrate that such longer interval is justified by performance characteristics of the source or device or similar sources or devices and by design features that have a significant bearing on the probability or consequences of leakage of radioactive material from the source.

(2) In determining the acceptable interval for test of leakage of radioactive material, the Commission will consider information that includes, but is not limited to:

(i) Primary containment (source capsule);

(ii) Protection of primary containment;

(iii) Method of sealing containment;

(iv) Containment construction materials;

(v) Form of contained radioactive material;

(vi) Maximum temperature withstood during prototype tests;

(vii) Maximum pressure withstood during prototype tests;

(viii) Maximum quantity of contained radioactive material;

(ix) Radiotoxicity of contained radioactive material;

(x) Operating experience with identical sources or devices or similarly designed and constructed sources or devices.

(c) If an application is filed pursuant to paragraph (a) of this section on or before October 15, 1974, for a license to manufacture and distribute a source or device that was distributed commercially on or before August 16, 1974, the applicant may continue the distribution of such source or device to group licensees until the Commission issues the license or notifies the applicant otherwise.

[39 FR 26149, July 17, 1974, as amended at 51 FR 36967, Oct. 16, 1986]

§ 32.101 Schedule B—prototype tests for luminous safety devices for use in aircraft.

An applicant for a license pursuant to § 32.53 shall conduct prototype tests on each of five prototype luminous safety devices for use in aircraft as follows:

(a) *Temperature-altitude test.* The device shall be placed in a test chamber as it would be used in service. A temperature-altitude condition schedule shall be followed as outlined in the following steps:

Step 1. The internal temperature of the test chamber shall be reduced to -62° C. (-80° F.) and the device shall be maintained for at least 1 hour at this temperature at atmospheric pressure.

Step 2. The internal temperature of the test chamber shall be raised to -54° C. (-65° F.) and maintained until the temperature of the device has stabilized at -54° C. at atmospheric pressure.

Step 3. The atmospheric pressure of the chamber shall be reduced to 83 millimeters of mercury absolute pressure while the chamber temperature is maintained at -54° C.

Step 4. The internal temperature of the chamber shall be raised to -10° C. (+14° F.) and maintained until the temperature of the device has stabilized at -10° C., and the internal pressure of the chamber shall then be adjusted to atmospheric pressure. The test chamber door shall then be opened in order that frost will form on the device, and shall remain open until the frost has melted but not long enough to allow the moisture to evaporate. The door shall then be closed.

Step 5. The internal temperature of the chamber shall be raised to +85° C. (185° F.) at atmospheric pressure. The temperature of the device shall be stabilized at +85° C. and maintained for 2 hours. The device shall then be visually inspected to determine the extent of any deterioration.

Step 6. The chamber temperature shall be reduced to +71° C. (160° F.) at atmospheric pressure. The temperature of the device shall be stabilized at +71° C. for a period of 30 minutes.

Step 7. The chamber temperature shall be reduced to +55° C. (130° F.) at atmospheric pressure. The temperature of the device shall be stabilized at this temperature for a period of 4 hours.

Step 8. The internal temperature of the chamber shall be reduced to +30° C. (86° F.) and the pressure to 138 millimeters of mercury absolute pressure and stabilized. The device shall be maintained under these conditions for a period of 4 hours.

Step 9. The temperature of the test chamber shall be raised to +35° C. (95° F.) and the pressure reduced to 83 millimeters of mercury absolute pressure and stabilized. The device shall be maintained under these conditions for a period of 30 minutes.

Step 10. The internal pressure of the chamber shall be maintained at 83 millimeters of mercury absolute pressure and the temperature reduced to +20° C. (68° F.) and stabilized. The device shall be maintained under these conditions for a period of 4 hours.

(b) *Vibration tests.* This procedure applies to items of equipment (including vibration isolating assemblies) intended to be mounted directly on the structure of aircraft powered by reciprocating, turbojet, or turbo-propeller engines or to be mounted directly on gas-turbine engines. The device shall be mounted on an apparatus dynamically similar to the most severe conditions likely to be encountered in normal use. At the end of the test period, the device shall be inspected thoroughly for possible damage. Vibration tests shall be conducted under both resonant and cycling conditions according to the following Vibration Test Schedule (Table I):

VIBRATION TEST SCHEDULE—TABLE I

[Times shown refer to one axis of vibration]

Type	Vibration at room temperature (minutes)	Vibration at 160° F (71° C) (minutes)	Vibration at -65° F (-54° C) (minutes)
Resonance	60	15	15
Cycling	60	15	15

(1) *Determination of resonance frequency.* Individual resonance frequency surveys shall be conducted by applying vibration to each device along each of any set of three mutually perpendicular axes and varying the frequency of applied vibration slowly through a range of frequencies from 5 cycles per second to 500 cycles per second with the double amplitude of the vibration not exceeding that shown in Figure 1 for the related frequency.

(2) *Resonance tests.* The device shall be vibrated at the determined resonance frequency for each axis of vibration for the periods and temperature conditions shown in Table I and with the applied double amplitude specified in Figure 1 for that resonance frequency. When more than one resonant frequency is encountered with vibration applied along any one axis, the test period may be accomplished at the most severe resonance or the period may be divided among the resonant frequencies, whichever is considered most likely to produce failure. When resonant frequencies are not ap-

parent within the specified frequency range, the specimen shall be vibrated for periods twice as long as those shown for resonance in Table I at a frequency of 55 cycles per second and an applied double amplitude of 0.060 inch.

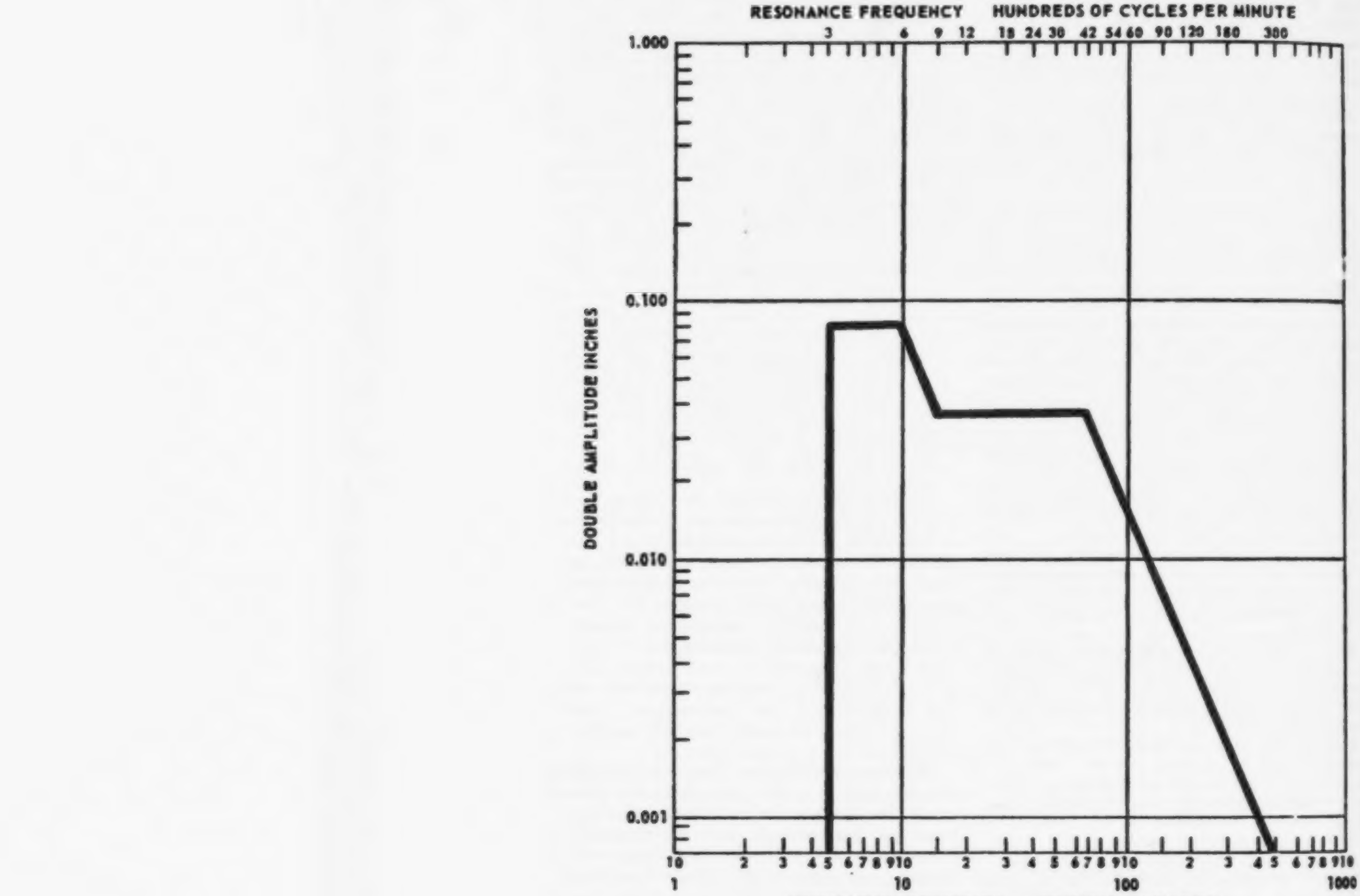

Figure 1—Amplitude of vibration at resonance frequency.

(3) *Cycling.* Devices to be mounted only on vibration isolators shall be tested by applying vibration along each of three mutually perpendicular axes of the device with an applied double amplitude of 0.060 inch and the frequency cycling between 10 and 55 cycles per second in 1-minute cycles

for the periods and temperature conditions shown in Table I. Devices to be installed in aircraft without vibration isolators shall be tested by applying vibration along each of three mutually perpendicular axes of the device with an applied double amplitude of 0.036 inch or an applied acceleration of 10G, whichever is the limiting value, and the frequency cycling between 10 and 500 cycles per second in 15-minute cycles for the periods and temperature conditions shown in Table I.

(c) *Accelerated weathering tests.* The device shall be subjected to 100 hours of accelerated weathering in a suitable weathering machine. Panels of Corex D glass shall surround the arc to cut off the ultraviolet radiation below a wave-length of 2,700 angstroms. The light of the carbon arcs shall fall directly on the face of the device. The temperature at the sample shall be maintained at 50°C. plus or minus 3°C. Temperature measurements shall be made with a black panel thermometer.

(d) *Shock test.* The device shall be dropped upon a concrete or iron surface in a 3-foot free gravitational fall, or shall be subjected to equivalent treatment in a test device simulating such a free fall. The drop test shall be repeated 100 times from random orientations.

(e) *Hermetic seal and waterproof test.* On completion of all other tests prescribed by this section, the device shall be immersed in 30 inches of water for 24 hours and shall show no visible evidence of water entry. Absolute pressure of the air above the water shall then be reduced to 1 inch of mercury. Lowered pressure shall be maintained for 1 minute or until air bubbles cease to be given off by the water, whichever is the longer. Pressure shall then be increased to normal atmospheric pressure. Any evidence of bubbles emanating from within the device, or water entering the device, shall be considered leakage.

(f) *Observations.* After each of the tests prescribed by this section, each device shall be examined for evidence of physical damage and for loss of tritium or promethium-147. Any evidence of damage to or failure of any device which could affect containment of the tritium or promethium-147 shall be cause for rejection of the design if the damage or failure is attributable to a design defect. Loss of tritium or promethium-147 from each tested device shall be measured by wiping with filter paper an area of at least 100 square centimeters on the outside surface of the device, or by wiping the entire surface area if it is less than 100 square centimeters. The amount of tritium or promethium-147 in the water used in the hermetic seal and waterproof test prescribed by test paragraph (e) of this section shall also be measured. Measurements shall be made in an apparatus calibrated to measure tritium or promethium-147, as appropriate. The detection on the filter paper of more than 2,200 disintegrations per minute of tritium or promethium-147 per 100 square centimeters of surface wiped or in the water of more than 0.1 percent of the original amount of tritium or promethium-147 in any device shall be cause for rejection of the tested device.

[30 FR 8192, June 26, 1965]

§ 32.102 Schedule C—prototype tests for calibration or reference sources containing americium-241.

An applicant for a license pursuant to § 32.57 shall, for any type of source which is designed to contain more than 0.005 microcurie of americium-241, conduct prototype tests, in the order listed, on each of five prototypes of such source, which contains more than 0.005 microcurie of americium-241, as follows:

(a) *Initial measurement.* The quantity of radioactive material deposited on the source shall be measured by direct counting of the source.

(b) *Dry wipe test.* The entire radioactive surface of the source shall be wiped with filter paper with the application of moderate finger pressure. Removal of radioactive material from the source shall be determined by measuring the radioactivity on the filter paper or by direct measurement of the radioactivity on the source following the dry wipe.

(c) *Wet wipe test.* The entire radioactive surface of the source shall be wiped with filter paper, moistened with water, with the application of moderate finger pressure. Removal of radioactive material from the source shall be determined by measuring the radioactivity on the filter paper after it has dried or by direct measurement of the radioactivity on the source following the wet wipe.

(d) *Water soak test.* The source shall be immersed in water at room temperature for a period of 24 consecutive hours. The source shall then be removed from the water. Removal of radioactive material from the source shall be determined by direct measurement of the radioactivity on the source after it has dried or by measuring the radioactivity in the residue obtained by evaporation of the water in which the source was immersed.

(e) *Dry wipe test.* On completion of the preceding test in this section, the dry wipe test described in paragraph (b) of this section shall be repeated.

(f) *Observations.* Removal of more than 0.005 microcurie of radioactivity in any test prescribed by this section shall be cause for rejection of the source design. Results of prototype tests submitted to the Commission shall be given in terms of radioactivity in microcuries and percent of removal from the total amount of radioactive material deposited on the source.

[30 FR 8192, June 26, 1965, as amended at 31 FR 15145, Dec. 2, 1966]

§ 32.103 Schedule D—prototype tests for ice detection devices containing strontium-90.

An applicant for a license pursuant to § 32.61 shall conduct prototype tests on each of five prototype ice detection devices as follows:

(a) *Temperature-altitude test.* The device shall be placed in a test chamber as it would be used in service. A temperature-altitude condition schedule shall be followed as outlined in Step 1 through Step 10 of § 32.101(a).

(b) *Vibration tests.* The device shall be subjected to vibration tests as set forth in § 32.101(b).

(c) *Shock test.* The device shall be subjected to shock test as set forth in § 32.101(d).

(d) *Hermetic seal and waterproof test.* On completion of all other tests prescribed by this section, the device shall be immersed in 30 inches of water for 24 hours and shall show no visible evidence of physical contact between the water and the strontium-90. Absolute pressure of the air above the water shall then be reduced to 1 inch of mercury. Lowered pressure shall be maintained for 1 minute or until air bubbles cease to be given off by the water, whichever is the longer. Pressure shall then be increased to normal atmospheric pressure. Any visible evidence of physical contact between the water and the strontium-90 shall be considered leakage.

(e) *Observations.* After each of the tests prescribed by this section, each device shall be examined for evidence of physical damage and for loss of strontium-90. Any evidence of leakage or damage to or failure of any device which could affect containment of the strontium-90 shall be cause for rejection of the design if the damage or failure is attributable to a design defect. Loss of strontium-90 from each tested device shall be measured by wiping with filter paper an area of at least 100 square centimeters on the outside surface of the device, or by wiping the entire surface area if it is less than 100 square centimeters. The amount of strontium-90 in the water used in the hermetic seal and waterproof test prescribed in paragraph (d) of this section shall also be measured. The detection on the filter paper of more than 2,200 disintegrations per minute of strontium-90 per 100 square centimeters of surface wiped or in the water of more than 0.1 percent of the original amount of strontium-90 in any device, shall be cause for rejection of the tested device.

[30 FR 9906, Aug. 10, 1965]

Subpart C—Quality Control Sampling Procedures

§ 32.110 Acceptance sampling procedures under certain specific licenses.

(a) A random sample shall be taken from each inspection lot of devices licensed under §§ 32.14, 32.53, or 32.61 of this part for which testing is required pursuant to §§ 32.15, 32.55, or 32.62 in accordance with the appropriate Sampling Table in this section determined by the designated Lot Tolerance Percent Defective. If the number of defectives in the sample does not exceed the acceptance number in the appropriate Sampling Table in this section, the lot shall be accepted. If the number of defectives in the sample exceeds the acceptance number in the appropriate Sampling Table in this section, the entire inspection lot shall be rejected.

(b) Single sampling tables for Lot Tolerance Percent Defective:

(1) Lot Tolerance Percent Defective 0.5 percent:

Lot size	Sample size	Acceptance No
1 to 180	All	0
181 to 210	180	0
211 to 250	210	0
251 to 300	240	0
301 to 400	275	0
401 to 500	300	0
501 to 600	320	0
601 to 800	350	0
801 to 1,000	365	0
1,001 to 2,000	410	0
2,001 to 3,000	430	0
3,001 to 4,000	440	0
4,001 to 5,000	445	0
5,001 to 7,000	450	0
7,001 to 10,000	455	0
10,001 to 20,000	460	0
20,001 to 50,000	775	1
50,001 to 100,000	780	1

(2) Lot Tolerance Percent Defective 1.0 percent:

Lot size	Sample size	Acceptance No
1 to 120	All	0
121 to 150	120	0
151 to 200	140	0
201 to 300	165	0
301 to 400	175	0
401 to 500	180	0
501 to 600	190	0
601 to 800	200	0
801 to 1,000	205	0
1,001 to 3,000	220	0
3,001 to 5,000	225	0
5,001 to 10,000	230	0
10,001 to 100,000	390	1

(3) Lot Tolerance Percent Defective 2.0 percent:

Lot size	Sample size	Acceptance No
1 to 75	All	0
76 to 100	70	0
101 to 200	85	0
201 to 300	95	0
301 to 400	100	0
401 to 600	105	0
601 to 800	110	0
801 to 4,000	115	0
4,001 to 10,000	195	1
10,001 to 100,000	200	1

(4) Lot Tolerance Percent Defective 3.0 percent:

Lot size	Sample size	Acceptance No
1 to 40	All	0
41 to 55	40	0
56 to 100	55	0
101 to 200	65	0
201 to 500	70	0
501 to 3,000	75	0
3,001 to 100,000	130	1

(5) Lot Tolerance Percent Defective 4.0 percent:

Lot size	Sample size	Acceptance No
1 to 35	All	0
36 to 50	34	0
51 to 100	44	0
101 to 200	50	0
201 to 2,000	55	0
2,001 to 100,000	95	1

(6) Lot Tolerance Percent Defective 5.0 percent:

Lot size	Sample size	Acceptance No
1 to 30	All	0
31 to 50	30	0
51 to 100	37	0
101 to 200	40	0
201 to 300	43	0
301 to 400	44	0
401 to 2,000	45	0
2,001 to 100,000	75	1

(7) Lot Tolerance Percent Defective 7.0 percent:

Lot size	Sample size	Acceptance No
1 to 25	All	0
26 to 50	24	0
51 to 100	28	0
101 to 200	30	0
201 to 300	31	0

Lot size	Sample size	Acceptance No
301 to 800	32	0
801 to 1,000	33	0
1,001 to 100,000	55	1

(8) Lot Tolerance Percent Defective 10.0 percent:

Lot size	Sample size	Acceptance No
1 to 20	All	0
21 to 50	17	0
51 to 100	20	0
101 to 200	22	0
201 to 800	23	0
801 to 100,000	39	1

[39 FR 22130, June 20, 1974]

Subpart D—Specifically Licensed Items

§ 32.210 Registration of product information.

(a) Any manufacturer or initial distributor of a sealed source or device containing a sealed source whose product is intended for use under a specific license may submit a request to NRC for evaluation of radiation safety information about its product and for its registration.

(b) The request for review must be made in duplicate and sent to the U.S. Nuclear Regulatory Commission; Division of Fuel Cycle, Medical, Academic, and Commercial Use Safety; Medical, Academic, and Commercial Use Safety Branch; Washington, DC 20555.

(c) The request for review of a sealed source or a device must include sufficient information about the design, manufacture, prototype testing, quality control program, labeling, proposed uses and leak testing and, for a device, the request must also include sufficient information about installation, service and maintenance, operating and safety instructions, and its potential hazards, to provide reasonable assurance that the radiation safety properties of the source or device are adequate to protect health and minimize danger to life and property.

(d) The NRC normally evaluates a sealed source or a device using radiation safety criteria in accepted industry standards. If these standards and criteria do not readily apply to a particular case, the NRC formulates reasonable standards and criteria with the help of the manufacturer or distributor. The NRC shall use criteria and standards sufficient to ensure that the radiation safety properties of the device or sealed source are adequate to protect health and minimize danger to life and property.

(e) After completion of the evaluation, the Commission issues a certificate of registration to the person making the request. The certificate of registration acknowledges the availability of the submitted information for inclusion in an application for a specific license proposing use of the product.

(f) The person submitting the request for evaluation and registration of safety information about the product shall manufacture and distribute the product in accordance with—

(1) The statements and representations, including quality control program, contained in the request; and

(2) The provisions of the registration certificate.

[52 FR 27786, July 24, 1987]

PART 33—SPECIFIC DOMESTIC LICENSES OF BROAD SCOPE FOR BYPRODUCT MATERIAL

Sec.
33.1 Purpose and scope.
33.8 Information collection requirements: OMB approval.

SPECIFIC LICENSES OF BROAD SCOPE

33.11 Types of specific licenses of broad scope.
33.12 Applications for specific licenses of broad scope.
33.13 Requirements for the issuance of a Type A specific license of broad scope.
33.14 Requirements for the issuance of a Type B specific license of broad scope.
33.15 Requirements for the issuance of a Type C specific license of broad scope.
33.16 Application for other specific licenses.
33.17 Conditions of specific licenses of broad scope.

SCHEDULES

33.100 Schedule A.

AUTHORITY: Secs. 81, 161, 182, 183, 68 Stat. 935, 948, 953, 954, as amended; 42 U.S.C. 2111, 2201 2232, 2233. For the purposes of sec. 223, 68 Stat. 958 as amended; 42 U.S.C. 2273, § 33.17(a) issued under sec. 161b., 68 Stat. 948; 42 U.S.C. 2201(b).

SOURCE: 33 FR 14579, Sept. 28, 1968, unless otherwise noted.

§ 33.1 Purpose and scope.

This part prescribes requirements for the issuance of specific licenses of broad scope for byproduct material ("broad licenses") and certain regulations governing holders of such licenses. The provisions and requirements of this part are in addition to, and not in substitution for, other requirements of this chapter. In particular, the provisions of Part 30 of this chapter apply to applications and licenses subject to this part.

§ 33.8 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). OMB has approved the information collection requirements contained in this part under control number 3150-0015.

(b) The approved information collection requirements contained in this part appear in §§ 33.12, 33.13, 33.14 and 33.15.

(c) This part contains information collection requirements in addition to those approved under the control number specified in paragraph (a) of this section. These information collection requirements and the control numbers under which they are approved are as follows:

(1) In § 33.12, Form NRC-313I is approved under control number 3150-0042.

(2) In § 33.12, Form NRC-313M is approved under control number 3150-0041.

(3) In § 33.12, Form NRC-313R is approved under control number 3150-0023.

(4) In § 33.12, Form NRC-313T is approved under control number 3150-0081.

[49 FR 19625, May 9, 1984]

SPECIFIC LICENSES OF BROAD SCOPE

§ 33.11 Types of specific licenses of broad scope.

(a) A "Type A specific license of broad scope" is a specific license authorizing receipt, acquisition, ownership, possession, use, and transfer of any chemical or physical form of the byproduct material specified in the license, but not exceeding quantities specified in the license, for purposes authorized by the Act. The quantities specified are usually in the multicurie range.

(b) A "Type B specific license of broad scope" is a specific license authorizing receipt, acquisition, ownership, possession, use, and transfer of any chemical or physical form of byproduct material specified in § 33.100, Schedule A, of this part for purposes authorized by the Act. The possession limit for a Type B broad license, if only one radionuclide is possessed thereunder, is the quantity specified for that radionuclide in § 33.100, Schedule A, Column I. If two or more radionuclides are possessed thereunder, the possession limit for each is determined as follows: For each radionuclide, determine the ratio of the quantity possessed to the applicable quantity specified in § 33.100, Schedule A, Column I, for that radionuclide. The sum of the ratios for all radionuclides possessed under the license shall not exceed unity

(c) A "Type C specific license of broad scope" is a specific license authorizing receipt, acquisition, ownership, possession, use, and transfer of any chemical or physical form of byproduct material specified in § 33.100, Schedule A, for purposes authorized by the Act. The possession limit for a Type C broad license, if only one radionuclide is possessed thereunder, is the quantity specified for that radionuclide in § 33.100, Schedule A, Column II. If two or more radionuclides are possessed thereunder, the possession limit is determined for each as follows: For each radionuclide determine the ratio of the quantity possessed to the applicable quantity specified in § 33.100, Schedule A, Column II, for that radionuclide. The sum of the ratios for all radionuclides possessed under the license shall not exceed unity.

(Sec. 161, as amended, Pub. L. 83-703, 68 Stat. 948 (42 U.S.C. 2201); sec. 201, as amended, Pub. L. 93-438, 88 Stat. 1243 (42 U.S.C. 5841))

[33 FR 14579, Sept. 28, 1968, as amended at 43 FR 6923, Feb. 17, 1978]

§ 33.12 Applications for specific licenses of broad scope.

A person may file an application for specific license of broad scope in duplicate on NRC Form 313, "Application for Material License," in accordance with the provisions of § 30.32 of this chapter.

[49 FR 27924, July 9, 1984]

§ 33.13 Requirements for the issuance of a Type A specific license of broad scope.

An application for a Type A specific license of broad scope will be approved if:

(a) The applicant satisfies the general requirements specified in § 30.33 of this chapter;

(b) The applicant has engaged in a reasonable number of activities involving the use of byproduct material; and

(c) The applicant has established administrative controls and provisions relating to organization and management, procedures, record keeping, material control, and accounting and management review that are necessary to assure safe operations, including:

(1) The establishment of a radiation safety committee composed of such persons as a radiological safety officer, a representative of management, and persons trained and experienced in the safe use of radioactive materials;

(2) The appointment of a radiological safety officer who is qualified by training and experience in radiation protection, and who is available for advice and assistance on radiological safety matters; and

(3) The establishment of appropriate administrative procedures to assure:

(i) Control of procurement and use of byproduct material;

(ii) Completion of safety evaluations of proposed uses of byproduct material which take into consideration such matters as the adequacy of facilities and equipment, training and experience of the user, and the operating or handling procedures; and

(iii) Review, approval, and recording by the radiation safety committee of safety evaluations of proposed uses prepared in accordance with paragraph (c)(3)(ii) of this section prior to use of the byproduct material.

§ 33.14 Requirements for the issuance of a Type B specific license of broad scope.

An application for a Type B specific license of broad scope will be approved if:

(a) The applicant satisfies the general requirements specified in § 30.33 of this chapter; and

(b) The applicant has established administrative controls and provisions relating to organization and management, procedures, record keeping, material control and accounting, and management review that are necessary to assure safe operations, including:

(1) The appointment of a radiological safety officer who is qualified by training and experience in radiation protection, and who is available for advice and assistance on radiological safety matters; and

(2) The establishment of appropriate administrative procedures to assure:

(i) Control of procurement and use of byproduct material;

(ii) Completion of safety evaluations of proposed uses of byproduct material which take into consideration such matters as the adequacy of facilities and equipment, training and experience of the user, and the operating or handling procedures; and

(iii) Review, approval, and recording by the radiological safety officer of safety evaluations of proposed uses prepared in accordance with paragraph (b)(2)(ii) of this section prior to use of the byproduct material.

§ 33.15 Requirements for the issuance of a Type C specific license of broad scope.

An application for a Type C specific license of broad scope will be approved if:

(a) The applicant satisfies the general requirements specified in § 30.33 of this chapter; and

(b) The applicant submits a statement that byproduct material will be used only by, or under the direct supervision of, individuals who have received:

(1) A college degree at the bachelor level, or equivalent training and experience, in the physical or biological sciences or in engineering; and

(2) At least 40 hours of training and experience in the safe handling of radioactive materials, and in the characteristics of ionizing radiation, units of radiation dose and quantities, radiation detection instrumentation, and biological hazards of exposure to radiation appropriate to the type and forms of byproduct material to be used; and

(c) The applicant has established administrative controls and provisions relating to procurement of byproduct material, procedures, record keeping, material control and accounting, and management review necessary to assure safe operations.

§ 33.16 Application for other specific licenses.

An application filed pursuant to Part 30 of this chapter for a specific license other than one of broad scope will be considered by the Commission as an application for a specific license of broad scope under this part if the requirements of the applicable sections of this part are satisfied.

§ 33.17 Conditions of specific licenses of broad scope.

(a) Unless specifically authorized pursuant to other parts of this chapter, persons licensed under this part shall not:

(1) Conduct tracer studies in the environment involving direct release of byproduct material;

(2) Receive, acquire, own, possess, use, transfer, or import devices containing 100,000 curies or more of byproduct material in sealed sources used for irradiation of materials;

(3) Conduct activities for which a specific license issued by the Commission under Part 32, 34, or 35 of this chapter is required; or

(4) Add or cause the addition of byproduct material to any food, beverage, cosmetic, drug, or other product designed for ingestion or inhalation by, or application to, a human being.

(b) Each Type A specific license of broad scope issued under this part shall be subject to the condition that byproduct material possessed under the license may only be used by, or under the direct supervision of, individuals approved by the licensee's radiation safety committee.

(c) Each Type B specific license of broad scope issued under this part shall be subject to the condition that byproduct material possessed under the license may only be used by, or under the direct supervision of, individuals approved by the licensee's radiological safety officer.

(d) Each Type C specific license of broad scope issued under this part shall be subject to the condition that byproduct material possessed under the license may only be used by, or under the direct supervision of, individuals who satisfy the requirements of § 33.15 of this part.

SCHEDULES

§ 33.100 Schedule A.

Byproduct material	Col I curies	Col II curies
Antimony-122	1	0.01
Antimony-124	1	.01
Antimony-125	1	.01
Arsenic-73	10	.1
Arsenic-74	1	.01
Arsenic-76	1	.01
Arsenic-77	10	.1
Barium-131	10	.1
Barium-140	1	.01
Bismuth-210	.1	.001
Bromine-82	10	.1
Cadmium-109	1	.01
Cadmium-115m	1	.01
Cadmium-115	10	.1
Calcium-45	1	.01
Calcium-47	10	.1
Carbon-14	100	1
Cerium-141	10	.1
Cerium-143	10	.1
Cerium-144	.1	.001
Cesium-131	100	1
Cesium-134m	100	1
Cesium-134	.1	.001
Cesium-135	1	.01
Cesium-136	10	.1
Cesium-137	.1	.001
Chlorine-36	1	.01
Chlorine-38	100	1
Chromium-51	100	1

Byproduct material	Col. I curies	Col. II curies
Cobalt-58m	100	1
Cobalt-58	1	.01
Cobalt-60	.1	.001
Copper-64	10	.1
Dysprosium-165	100	1
Dysprosium-166	10	.1
Erbium-169	10	.1
Erbium-171	10	.1
Europium-152 9.2 h	10	.1
Europium-152 13 y	1	.001
Europium-154	1	.001
Europium-155	1	.01
Fluorine-18	100	1
Gadolinium-153	1	.01
Gadolinium-159	10	.1
Gallium-72	10	.1
Germanium-71	100	1
Gold-198	10	.1
Gold-199	10	.1
Hafnium-181	1	.01
Holmium-166	10	.1
Hydrogen-3	100	1
Indium-113m	100	1
Indium-114m	1	.01
Indium-115m	100	1
Indium-115	1	.01
Iodine-125	1	.001
Iodine-126	1	.001
Iodine-129	1	.01
Iodine-131	1	.001
Iodine-132	10	.1
Iodine-133	1	.01
Iodine-134	10	.1
Iodine-135	1	.01
Iridium-192	1	.01
Iridium-194	10	.1
Iron-55	10	.1
Iron-59	1	.01
Krypton-85	100	1
Krypton-87	10	.1
Lanthanum-140	1	.01
Lutetium-177	10	.1
Manganese-52	1	.01
Manganese-54	1	.01
Manganese-56	10	.1
Mercury-197m	10	.1
Mercury-197	10	.1
Mercury-203	1	.01
Molybdenum-99	10	.1
Neodymium-147	10	.1
Neodymium-149	10	.1
Nickel-59	10	.1
Nickel-63	1	.01
Nickel-65	10	.1
Niobium-93m	1	.01
Niobium-95	1	.01
Niobium-97	100	1
Osmium-185	1	.01
Osmium-191m	100	1
Osmium-191	10	.1
Osmium-193	10	.1
Palladium-103	10	.1
Palladium-109	10	.1
Phosphorus-32	1	.01
Platinum-191	10	.1
Platinum-193m	100	1
Platinum-193	10	.1
Platinum-197m	100	1
Platinum-197	10	.1
Polonium-210	.01	.0001
Potassium-42	1	.01
Praseodymium-142	10	.1
Praseodymium-143	10	.1
Promethium-147	1	.01
Promethium-149	10	.1
Rhenium-186	10	.1
Rhenium-188	10	.1
Rhodium-103m	1,000	10
Rhodium-105	10	.1
Rubidium-86	1	.01
Rubidium-87	1	.01
Ruthenium-97	100	1
Ruthenium-103	1	.01
Ruthenium-105	10	.1
Ruthenium-106	1	.001
Samarium-151	1	.01
Samarium-153	10	.1
Scandium-46	1	.01
Scandium-47	10	.1
Scandium-48	1	.01
Selenium-75	1	.01
Silicon-31	10	.1
Silver-105	1	.01
Silver-110m	1	.001
Silver-111	10	.1
Sodium-24	1	.01
Strontium-85m	1,000	10
Strontium-85	1	.01
Strontium-89	1	.01
Strontium-90	.01	.0001
Strontium-91	10	.1
Strontium-92	10	.1
Sulphur-35	10	.1
Tantalum-182	1	.01
Technetium-96	10	.1
Technetium-97m	10	.1
Technetium-97	10	.1
Technetium-99m	100	1
Technetium-99	1	.01
Tellurium-125m	1	.01
Tellurium-127m	1	.01
Tellurium-127	10	.1
Tellurium-129m	1	.01
Tellurium-129	100	1
Tellurium-131m	10	.1
Tellurium-132	1	.01
Terbium-160	1	.01
Thallium-200	10	.1
Thallium-201	10	.1
Thallium-202	10	.1
Thallium-204	1	.01
Thulium-170	1	.01
Thulium-171	1	.01
Tin-113	1	.01
Tin-125	1	.01
Tungsten-181	1	.01
Tungsten-185	1	.01
Tungsten-187	10	.1
Vanadium-48	1	.01
Xenon-131m	1,000	10
Xenon-133	100	1
Xenon-135	100	1
Ytterbium-175	10	.1
Yttrium-90	1	.01
Yttrium-91	1	.01
Yttrium-92	10	.1
Yttrium-93	1	.01
Zinc-65	1	.01
Zinc-69m	10	.1
Zinc-69	100	1
Zirconium-93	1	.01
Zirconium-95	1	.01
Zirconium-97	1	.01

Byproduct material	Col. I curies	Col. II curies
y byproduct material other than lpha emitting byproduct material not sted above	.1	.001

ec. 201, Pub. L. 93-438; 88 Stat. 1242 (42 .S.C. 5841))

3 FR 14579, Sept. 28, 1968]

ART 34—LICENSES FOR RADIOGRAPHY AND RADIATION SAFETY REQUIREMENTS FOR RADIOGRAPHIC OPERATIONS

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APPENDIX A

AUTHORITY: Secs. 81, 161, 182, 183, 68 Stat. 935, 948, 953, 954, as amended (42 U.S.C. 2111, 2201, 2232, 2233); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841).

Section 34.32 also issued under sec. 206, 88 Stat. 1246 (42 U.S.C. 5846).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273); §§ 34.20(a)-(e), 34.21 (a) and (b), 34.22, 34.23, 34.24, 34.25 (a), (b), and (d), 34.28, 34.29, 34.31 (a) and (b), 34.32, 34.33 (a), (c), (d), and (f), 34.41, 34.42, 34.43 (a), (b), and (c) and 34.44 are issued under sec. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201(b); and §§ 34.11(d), 34.25 (c) and (d), 34.26, 34.27, 34.28(b), 34.29(c), 34.30, 34.31(c), 34.33 (b) and (e) and 34.43(d) are issued under sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

SOURCE: 30 FR 8198, June 26, 1965, unless otherwise noted.

§ 34.1 Purpose and scope.

This part prescribes requirements for the issuance of licenses for the use of sealed sources containing byproduct material and radiation safety requirements for persons using such sealed sources in radiography. The provisions and requirements of this part are in addition to, and not in substitution for, other requirements of this chapter. In particular, the provisions of Part 30 of this chapter apply to applications and licenses subject to this part. Nothing in this part shall apply to uses of byproduct material for medical diagnosis or therapy.

§ 34.2 Definitions.

As used in this part:

"Permanent radiographic installation" means a shielded installation or structure designed or intended for radiography and in which radiography is regularly performed.

"Radiographer" means any individual who performs or who, in attendance at the site where the sealed source or sources are being used, personally supervises radiographic operations and who is responsible to the licensee for assuring compliance with the requirements of the Commission's regulations and the conditions of the license;

"Radiographer's assistant" means any individual who under the personal supervision of a radiographer, uses radiographic exposure devices, sealed sources or related handling tools, or radiation survey instruments in radiography;

"Radiographic exposure device" means any instrument containing a sealed source fastened or contained therein, in which the sealed source or shielding thereof may be moved, or otherwise changed, from a shielded to unshielded position for purposes of making a radiographic exposure;

"Radiography" means the examination of the structure of materials by nondestructive methods, utilizing sealed sources of byproduct materials;

"Sealed source" means any byproduct material that is encased in a capsule designed to prevent leakage or escape of the byproduct material;

"Source changer" means a device designed and used for replacement of sealed sources in radiographic exposure devices, including those also used for transporting and storage of sealed sources;

"Storage area" means any location, facility, or vehicle which is used to store, to transport, or to secure a radiographic exposure device, a storage container, or a sealed source when it is not in use and which is locked or has a physical barrier to prevent accidental exposure, tampering with, or unauthorized removal of the device, container, or source.

"Storage container" means a device in which sealed sources are transported or stored.

[30 FR 8198, June 26, 1965, as amended at 44 FR 50807, Aug. 30, 1979; 51 FR 21740, June 16, 1986]]

§ 34.3 Applications for specific licenses.

A person may file an application for specific license for use of sealed sources in radiography in duplicate on NRC Form 313, "Application for Material License," in accordance with the provisions of § 30.32 of this chapter.

[49 FR 27924, July 9, 1984]

§ 34.4 Maintenance of records.

Each record required by this part must be legible throughout the retention period specified by each Commission regulation. The record may be the original of a reproduced copy of a microform provided that the copy or microform is authenticated by authorized personnel and that the microform is capable of producing a clear copy throughout the required retention period. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records such as letters, drawings, specifications, must include all pertinent information such as stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.

[53 FR 19246, May 27, 1988; 53 FR 23383, June 22, 1988]

§ 34.8 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). OMB has approved the information collection requirements contained in this part under control number 3150-0007.

(b) The approved information collection requirements contained in this part appear in §§ 34.11, 34.24, 34.25, 34.26, 34.27, 34.28, 34.29, 34.31, 34.32, 34.33, and 34.43.

(c) This part contains information collection requirements in addition to those approved under the control number specified in paragraph (a) of this section. These information collection requirements and the control numbers under which they are approved are as follows:

(1) In § 34.3, Form NRC-313R is approved under control number 3150-0023.

[49 FR 19626, May 9, 1984]

Subpart A—Specific Licensing Requirements

§ 34.11 Issuance of specific licenses for use of sealed sources in radiography.

An application for a specific license for use of sealed sources in radiography will be approved if:

(a) The applicant satisfies the general requirements specified in § 30.33 of this chapter;

(b) The applicant will have an adequate program for training radiographers and radiographers' assistants and submits to the Commission a schedule or description of such program which specifies the:

(1) Initial training;

(2) Periodic training;

(3) On-the-job training;

(4) Means to be used by the licensee to determine the radiographer's knowledge and understanding of and ability to comply with Commission regulations and licensing requirements, and the operating and emergency procedures of the applicant; and

(5) Means to be used by the licensee to determine the radiographer's assistant's knowledge and understanding of and ability to comply with the operating and emergency procedures of the applicant;

(c) The applicant has established and submits to the Commission satisfactory written operating and emergency procedures as described in § 34.32;

(d) The applicant has established and submits to the Commission a description of its inspection program adequate to ensure that its radiographers and radiographers' assistants follow the Commission's regulatory requirements and the applicant's operating and emergency procedures. The inspection program must:

(1) Include observation of the performance of each radiographer and radiographer's assistant during an actual radiographic operation at intervals not to exceed three months;

(2) Provide that, if a radiographer or a radiographer's assistant has not participated in a radiographic operation for more than three months since the last inspection, that individual's performance must be observed and recorded the next time the individual participates in a radiographic operation; and

(3) Include the retention of inspection records on the performance of radiographers or radiographers' assistants for three years.

(e) The applicant submits a description of its over-all organizational structure pertaining to the radiography program, including specified delegations of authority and responsibility for operation of the program; and

(f) The applicant who desires to conduct his own leak tests has established adequate procedures to be followed in leak testing sealed sources, for possible leakage and contamination and submits to the Commission a description of such procedures including:

(1) Instrumentation to be used,

(2) Method of performing test, e.g., points on equipment to be smeared and method of taking smear, and

(3) Pertinent experience of the person who will perform the test.

[30 FR 8198, June 26, 1965, as amended at 51 FR 21740, June 16, 1986]

Subpart B—Radiation Safety Requirements

EQUIPMENT CONTROL

§ 34.20 Performance requirements for radiography equipment.

Equipment used in industrial radiographic operations must meet the following minimum criteria:

(a) Each radiographic exposure device and all associated equipment must meet the requirements specified in American National Standard N432-1980 "Radiological Safety for the Design and Construction of Apparatus for Gamma Radiography," (published as NBS Handbook 136, issued January 1981). This publication has been approved for incorporation by reference by the Director of the Federal Register in accordance with 5 U.S.C. 552(a). This publication may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 and from the American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018, Telephone (212) 642-4900. Copies of the document are available for inspection at the Nuclear Regulatory Commission Public Document Room, 2120 L Street NW., Lower Level, Washington, DC 20555. A copy of the document is also on file at the Office of the Federal Register, 1100 L Street NW., Room 8301, Washington, DC 20408.

(b) In addition to the requirements specified in paragraph (a) of this section, the following requirements apply to radiographic exposure devices and associated equipment.

(1) Each radiographic exposure device must have attached to it by the user, a durable, legible, clearly visible label bearing the—

(i) Chemical symbol and mass number of the radionuclide in the device;

(ii) Activity and the date on which this activity was last measured;

(iii) Model number and serial number of the sealed source;

(iv) Manufacturer of the sealed source; and

(v) Licensee's name, address, and telephone number.

(2) Radiographic exposure devices intended for use as Type B transport containers must meet the applicable requirements of 10 CFR part 71.

(3) Modification of any exposure devices and associated equipment is prohibited, unless the design of any replacement component, including source holder, source assembly, controls or guide tubes would not compromise the design safety features of the system.

(c) In addition to the requirements specified in paragraphs (a) and (b) of this section, the following requirements apply to radiographic exposure devices and associated equipment that allow the source to be moved out of the device for routine operation.

(1) The coupling between the source assembly and the control cable must be designed in such a manner that the source assembly will not become disconnected if cranked outside the guide tube. The coupling must be such that it cannot be unintentionally disconnected under normal and reasonably foreseeable abnormal conditions.

(2) The device must automatically secure the source assembly when it is cranked back into the fully shielded position within the device. This securing system may only be released by means of a deliberate operation on the exposure device.

(3) The outlet fittings, lock box, and drive cable fittings on each radiographic exposure device must be equipped with safety plugs or covers which must be installed during storage and transportation to protect the source assembly from water, mud, sand or other foreign matter.

(4) Each sealed source or source assembly must have attached to it or engraved in it, a durable, legible, visible label with the words: "DANGER—RADIOACTIVE." The label must not interfere with the safe operation of the exposure device or associated equipment.

(5) The guide tube must have passed the crushing tests for the control tube as specified in ANSI N432 and a kinking resistance test that closely approximates the kinking forces likely to be encountered during use.

(6) Guide tubes must be used when moving the source out of the device.

(7) An exposure head or similar device designed to prevent the source assembly from passing out of the end of the guide tube must be attached to the outermost end of the guide tube during radiographic operations.

(8) The guide tube exposure head connection must be able to withstand the tensile test for control units specified in ANSI N432.

(9) Source changers must provide a system for assuring that the source will not be accidentally withdrawn from the changer when connecting or disconnecting the drive cable to or from a source assembly.

(d) All newly manufactured radiographic exposure devices and associated equipment acquired by licensees after January 10, 1992 must comply with the requirements of this section.

(e) All radiographic exposure devices and associated equipment in use after January 10, 1996 must comply with the requirements of this section.

[55 FR 852, Jan. 10, 1990; 55 FR 2281, Jan. 23, 1990]

Effective Date Note: At 55 FR 852, Jan. 10, 1990, corrected at 55 FR 2281, Jan. 23, 1990, § 34.20 was added, effective January 10, 1991.

§ 34.21 Limits on levels of radiation for radiographic exposure devices and storage containers.

(a) Radiographic exposure devices measuring less than four (4) inches from the sealed source storage position to any exterior surface of the device shall have no radiation level in excess of 50 milliroentgens per hour at six (6) inches from any exterior surface of the device. Radiographic exposure devices measuring a minimum of four (4) inches from the sealed source storage position to any exterior surface of the device, and all storage containers for sealed sources or for radiographic exposure devices, shall have no radiation level in excess of 200 milliroentgens per hour at any exterior surface, and ten (10) milliroentgens per hour at one meter from any exterior surface. The radiation levels specified are with the sealed source in the shielded (i.e., "off") position.

(b) Paragraph (a) of this section applies to all equipment manufactured prior to January 10, 1992. After January 10, 1996, radiographic equipment other than storage containers and source changers must meet the requirements of § 34.20, and § 34.21 applies only to storage containers (source changers).

[30 FR 8198, June 26, 1965, as amended at 55 FR 853, Jan. 10, 1990; 55 FR 2281, Jan. 23, 1990]

Effective Date Note: At 55 FR 853, Jan. 10, 1990, corrected at 55 FR 2281, Jan. 23, 1990, § 34.21 was amended by redesignating the existing paragraph as paragraph (a) and adding new paragraph (b), effective January 10, 1991.

§ 34.22 Locking of radiographic exposure devices, storage containers, and source changers.

(a) Each radiographic exposure device shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The exposure device or its container shall be kept locked when not under the direct surveillance of a radiographer or a radiographer's assistant or as otherwise may be authorized in § 34.41. In addition, during radiographic operations the sealed source assembly shall be secured in the shielded position each time the source is returned to that position.

(b) Each sealed source storage container and source changer shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. Storage containers and source changers shall be kept locked when containing sealed sources except when under the direct surveillance of a radiographer or a radiographer's assistant.

[44 FR 50807, Aug. 30, 1979]

§ 34.23 Storage precautions.

Locked radiographic exposure devices and storage containers shall be physically secured to prevent tampering or removal by unauthorized personnel.

§ 34.24 Radiation survey instruments.

The licensee shall maintain sufficient calibrated and operable radiation survey instruments to make physical radiation surveys as required by this part and Part 20 of this chapter. Each radiation survey instrument shall be calibrated at intervals not to exceed three months and after each instrument servicing and a record shall be maintained of the results of each instrument calibration and date thereof for three years after the date of calibration. Instrumentation required by this section shall have a range such that two milliroentgens per hour through one roentgen per hour can be measured.

[30 FR 8198, June 26, 1965, as amended at 41 FR 18302, May 3, 1976; 53 FR 19246, May 27, 1988]

§ 34.25 Leak testing, repair, tagging, opening, modification and replacement of sealed sources.

(a) The replacement of any sealed source fastened to or contained in a radiographic exposure device and leak testing, repair, tagging, opening or any other modification of any sealed source shall be performed only by persons specifically authorized by the Commission to do so.

(b) Each sealed source shall be tested for leakage at intervals not to exceed 6 months. In the absence of a certificate from a transferor that a test has been made within the 6 months prior to the transfer, the sealed source shall not be put into use until tested.

(c) The leak test must be capable of detecting the presence of 0.005 microcurie of removable contamination on the sealed source. An acceptable leak test for sealed sources in the possession of a radiography licensee would be to test at the nearest accessible point to the sealed-source storage position, or other appropriate measuring point, by a procedure to be approved pursuant to § 34.11(f). Each record of leak test results must be kept in units of microcuries [or disintegrations per minute (dpm)] and retained for inspection by the Commission for three years after it is made.

(d) Any test conducted pursuant to paragraphs (b) and (c) of this section which reveals the presence of 0.005 microcurie or more of removable radioactive material shall be considered evidence that the sealed source is leaking. The licensee shall immediately withdraw the equipment involved from use and shall cause it to be decontaminated and repaired or to be disposed of, in accordance with Commission regulations. A report shall be filed, within 5 days of the test, with the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555 describing the equipment involved, the test results, and the corrective action taken. A copy of such report shall be sent to the Administrator of the appropriate Nuclear Regulatory Commission's Regional Office listed in Appendix D of Part 20 of this chapter "Standards for Protection Against Radiation."

(e) A sealed source which is not fastened to or contained in a radiographic exposure device shall have permanently attached to it a durable tag at least one (1) inch square bearing the prescribed radiation caution symbol in conventional colors, magenta or purple on a yellow background, and at least the instructions: "Danger—Radioactive Material—Do Not Handle—Notify Civil Authorities if Found."

[30 FR 8198, June 26, 1965, as amended at 38 FR 1271, Jan. 11, 1973; 40 FR 8786, Mar. 3, 1975; 53 FR 19246, May 27, 1988]

§ 34.26 Quarterly inventory.

Each licensee shall conduct a quarterly physical inventory to account for all sealed sources received and possessed under this license. The records of the inventories shall be maintained for three years from the date of the inventory for inspection by the Commission, and shall include the quantities and kinds of byproduct material, location of sealed sources, and the date of the inventory.

[41 FR 18302, May 3, 1976, as amended at 53 FR 19246, May 27, 1988]

§ 34.27 Utilization logs.

Each licensee shall maintain current logs, which shall be kept available for three years from the date of the recorded event, for inspection by the Commission, at the address specified in the license, showing for each sealed source the following information:

(a) A description (or make and model number) of the radiographic exposure device or storage container in which the sealed source is located;

(b) The identity of the radiographer to whom assigned; and

(c) The plant or site where used and dates of use.

[30 FR 8198, June 26, 1965, as amended at 53 FR 19246, May 27, 1988]

§ 34.28 Inspection and maintenance of radiographic exposure devices, storage containers, and source changers.

(a) The licensee shall check for obvious defects in radiographic exposure devices, storage containers, and source changers prior to use each day the equipment is used.

(b) The licensee shall conduct a program for inspection and maintenance of radiographic exposure devices, storage containers, and source changers at intervals not to exceed three months or prior to the first use thereafter to ensure proper functioning of components important to safety. The licensee shall retain records of these inspections and maintenance for three years.

[44 FR 50807, Aug. 30, 1979, as amended at 53 FR 19247, May 27, 1988]

§ 34.29 Permanent radiographic installations.

(a) Permanent radiographic installations having high radiation area entrance controls of the types described in § 20.203(c) (2)(ii), (2)(iii), or (4) of this chapter shall also meet the following special requirement.

(b) Each entrance that is used for personnel access to the high radiation area in a permanent radiographic installation to which this section applies shall have both visible and audible warning signals to warn of the presence of radiation. The visible signal shall be actuated by radiation whenever the source is exposed. The audible signal shall be actuated when an attempt is made to enter the installation while the source is exposed.

(c) The alarm system must be tested at intervals not to exceed three months or prior to the first use thereafter of the source in the installation. The licensee shall retain records of these tests for three years.

[44 FR 50807, Aug. 30, 1979, as amended at 53 FR 19247, May 27, 1988]

REPORTING

§ 34.30 Reporting requirements.

(a) In addition to the reporting requirements specified under other sections of this chapter, each licensee shall provide a written report to the U.S. Nuclear Regulatory Commission; Division of Industrial and Medical Nuclear Safety; Medical, Academic and Commercial Use Safety Branch; Washington, DC 20555, with a copy to the Director, Office for Analysis and Evaluation of Operational Data, U.S. Nuclear Regulatory Commission, Washington, DC 20555, within 30 days of the occurrence of any of the following incidents involving radiographic equipment:

(1) Unintentional disconnection of the source assembly from the control cable.

(2) Inability to retract the source assembly to its fully shielded position and secure it in this position.

(3) Failure of any component (critical to safe operation of the device) to properly perform its intended function.

(b) The licensee shall include the following information in each report submitted under paragraph (a) of this section:

(1) A description of the equipment problem.

(2) Cause of each incident, if known.

(3) Manufacturer and model number of equipment involved in the incident.

(4) Place, time and date of the incident.

(5) Actions taken to establish normal operations.

(6) Corrective actions taken or planned to prevent recurrence.

(7) Qualifications of personnel involved in the incident.

(c) Reports of overexposure submitted under 10 CFR 20.405 which involve failure of safety components of radiography equipment must also include the information specified in paragraph (b) of this section.

[55 FR 853, Jan. 10, 1990]

EFFECTIVE DATE NOTE: At 55 FR 853, Jan. 10, 1990, § 34.30 was added, effective January 10, 1991

PERSONAL RADIATION SAFETY REQUIREMENTS FOR RADIOGRAPHERS AND RADIOGRAPHERS' ASSISTANTS

§ 34.31 Training.

(a) The licensee shall not permit any individual to act as a radiographer until such individual:

(1) Has been instructed in the subjects outlined in Appendix A of this part;

(2) Has received copies of and instruction in NRC regulations contained in this part and in the applicable sections of Parts 19 and 20 of this chapter, NRC license(s) under which the radiographer will perform radiography, and the licensee's operating and emergency procedures;

(3) Has demonstrated competence to use the licensee's radiographic exposure devices, sealed sources, related handling tools, and survey instruments; and

(4) Has demonstrated understanding of the instructions in this paragraph (a) by successful completion of a written test and a field examination on the subjects covered.

(b) The licensee shall not permit any individual to act as a radiographer's assistant until such individual:

(1) Has received copies of and instruction in the licensee's operating and emergency procedures;

(2) Has demonstrated competence to use, under the personal supervision of the radiographer, the radiographic exposure devices, sealed sources, related handling tools, and radiation survey instruments that the assistant will use; and

(3) Has demonstrated understanding of the instructions in this paragraph (b) by successfully completing a written or oral test and a field examination on the subjects covered.

(c) Records of the above training, including copies of written tests and dates of oral tests and field examinations, shall be maintained for three years.

[44 FR 50808, Aug. 30, 1979]

§ 34.32 Operating and emergency procedures.

The licensee shall retain a copy of current operating and emergency procedures as a record until the Commission terminates the license that authorizes the activity for which the procedures were developed and, if superseded, retain the superseded material for three years after each change. These procedures must include instructions in at least the following:

(a) The handling and use of licensed sealed sources and radiographic exposure devices to be employed such that no person is likely to be exposed to radiation doses in excess of the limits established in Part 20 of this chapter "Standards for Protection Against Radiation";

(b) Methods and occasions for conducting radiation surveys;

(c) Methods for controlling access to radiographic areas;

(d) Methods and occasions for locking and securing radiographic exposure devices, storage containers and sealed sources;

(e) Personnel monitoring and the use of personnel monitoring equipment;

(f) Transporting sealed sources to field locations, including packing of radiographic exposure devices and storage containers in the vehicles, posting of vehicles and control of the sealed sources during transportation;

(g) Minimizing exposure of persons in the event of an accident;

(h) The procedure for notifying proper persons in the event of an accident; and

(i) Maintenance of records.

(j) The inspection and maintenance of radiographic exposure devices and storage containers.

(k) Steps that must be taken immediately by radiography personnel in the event a pocket dosimeter is found to be off-scale.

(l) The procedure(s) for identifying and reporting defects and noncompliance, as required by Part 21 of this chapter.

[30 FR 8198, June 26, 1965, as amended at 35 FR 17398, Nov. 13, 1970; 44 FR 50808, Aug. 30, 1979; 45 FR 2312, Jan. 11, 1980; 53 FR 19247, May 27, 1988]

§ 34.33 Personnel monitoring.

(a) The licensee shall not permit any individual to act as a radiographer or a radiographer's assistant unless, at all times during radiographic operations, each such individual wears a direct reading pocket dosimeter and either a film badge or a thermoluminescent dosimeter (TLD). Pocket dosimeters shall have a range from zero to at least 200 milliroentgens and shall be recharged at the start of each shift. Each film badge and TLD shall be assigned to and worn by only one individual.

(b) Pocket dosimeters must be read and exposures recorded daily. The licensee shall retain each record of these exposures for three years after the record is made.

(c) Pocket dosimeters shall be checked at periods not to exceed one year for correct response to radiation. Acceptable dosimeters shall read within plus or minus 30 percent of the true radiation exposure.

(d) If an individual's pocket dosimeter is discharged beyond its range, his film badge or TLD shall be immediately sent for processing.

(e) Reports received from the film badge or TLD processor must be retained for inspection until the Commission terminates each license that authorizes the activity that is subject to the recordkeeping requirement.

(f) Each alarm ratemeter must—

(1) Be checked to ensure that the alarm functions properly (sounds) prior to use at the start of each shift;

(2) Be set to give an alarm signal at a preset dose rate of 500 mR/hr.;

(3) Require special means to change the preset alarm function; and

(4) Be calibrated at periods not to exceed one year for correct response to radiation: Acceptable ratemeters must alarm within plus or minus 20 percent of the true radiation dose rate.

[44 FR 50808, Aug. 30, 1979, as amended at 53 FR 19247, May 27, 1988; 55 FR 853, Jan. 10, 1990]

Effective Date Note: At 55 FR 853, Jan. 10, 1990, paragraph (a) was revised and paragraph (f) was added, effective January 10, 1991. For the convenience of the user, the superseded text of paragraph (a) appears below.

§ 34.33 Personnel monitoring.

(a) The licensee may not permit any individual to act as a radiographer or a radiographer's assistant unless, at all times during radiographic operations, each such individual wears a direct reading pocket dosimeter, an alarm ratemeter, and either a film badge or a thermoluminescent dosimeter (TLD) except that for permanent radiography facilities where other appropriate alarming or warning devices are in routine use, the wearing of an alarming ratemeter is not required. Pocket dosimeters must have a range from zero to at least 200 milliroentgens and must be recharged at the start of each shift. Each film badge and TLD must be assigned to and worn by only one individual.

PRECAUTIONARY PROCEDURES IN RADIOGRAPHIC OPERATIONS

§ 34.41 Security.

During each radiographic operation the radiographer or radiographer's assistant shall maintain a direct surveillance of the operation to protect against unauthorized entry into a high radiation area, as defined in Part 20 of this chapter, except (a) where the high radiation area is equipped with a control device or an alarm system as described in § 20.203(c)(2) of this chapter, or (b) where the high radiation area is locked to protect against unauthorized or accidental entry.

§ 34.42 Posting.

Notwithstanding any provisions in § 20.204(c) of this chapter, areas in which radiography is being performed shall be conspicuously posted as required by § 20.203(b) and (c)(1) of this chapter.

§ 34.43 Radiation surveys.

The licensee shall ensure that:

(a) At least one calibrated and operable radiation survey instrument is available at the location of its radiographic operations whenever radiographic operations are being performed, and at the storage area, as defined in § 34.2, whenever a radiographic exposure device, a storage container, or source is being placed in storage.

(b) A survey with a calibrated and operable radiation survey instrument is made after each exposure to determine that the sealed source has been returned to its shielded position. The entire circumference of the radiographic exposure device must be surveyed. If the radiographic exposure device has a source guide tube, the survey must include the guide tube.

(c) A survey with a calibrated and operable radiation survey instrument is made at any time a radiographic exposure device is placed in a storage area, as defined in § 34.2, to determine that the sealed source is in its shielded position. The entire circumference of the radiographic exposure device must be surveyed.

(d) A record of the storage survey required in paragraph (c) of this section is made and is retained for three years when that storage survey is the last one performed in the work day.

[51 FR 21740, June 16, 1986]

§ 34.44 Supervision of radiographers' assistants.

Whenever a radiographer's assistant uses radiographic exposure devices, uses sealed sources or related source handling tools, or conducts radiation surveys required by § 34.43(b) to determine that the sealed source has returned to the shielded position after an exposure, he shall be under the personal supervision of a radiographer. The personal supervision shall include: (a) The radiographer's personal presence at the site where the sealed sources are being used, (b) the ability of the radiographer to give immediate assistance if required, and (c) the radiographer's watching the assistant's performance of the operations referred to in this section.

[44 FR 50808, Aug. 30, 1979]

EXEMPTIONS

§ 34.51 Applications for exemptions.

The Commission may, upon application by any licensee or upon its own initiative, grant such exemptions from the requirements of the regulations in this part as it determines are authorized by law and will not result in undue hazard to life or property.

[30 FR 8198, June 26, 1965]

APPENDIX A

I. FUNDAMENTALS OF RADIATION SAFETY

A. Characteristics of gamma radiation.
B. Units of radiation dose (mrem) and quantity of radioactivity (curie).
C. Hazards of exposure to radiation.
D. Levels of radiation from licensed material.
E. Methods of controlling radiation dose:
1. Working time.
2. Working distances.
3. Shielding.

II. RADIATION DETECTION INSTRUMENTATION TO BE USED

A. Use of radiation survey instruments:
1. Operation.
2. Calibration.
3. Limitations
B. Survey techniques.
C. Use of personnel monitoring equipment:
1. Film badges and thermoluminescent dosimeters (TLD's).
2. Pocket dosimeters.
3. Alarm ratemeters

III. RADIOGRAPHIC EQUIPMENT TO BE USED

A. Remote handling equipment.
B. Radiographic exposure devices.
C. Storage containers.

IV. INSPECTION AND MAINTENANCE PERFORMED BY THE RADIOGRAPHERS

V. CASE HISTORIES OF RADIOGRAPHY ACCIDENTS

[44 FR 50808, Aug. 30, 1979, as amended at 55 FR 853, Jan. 10, 1990]

EFFECTIVE DATE NOTE: At 55 FR 853, Jan. 10, 1990, paragraph 3 (appendix A, item II. C) was added, effective January 10, 1991.

PART 35—MEDICAL USE OF BYPRODUCT MATERIAL

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35.205 Control of aerosols and gases.
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Subpart F—Radiopharmaceuticals for Therapy

35.300 Use of radiopharmaceuticals for therapy.
35.310 Safety instruction.
35.315 Safety precautions.
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Subpart G—Sources for Brachytherapy

35.400 Use of sources for brachytherapy.
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35.999 Resolution of conflicting requirements during transition period.

AUTHORITY: Secs. 81, 161, 182, 183, 68 Stat. 935, 948, 953, 954, as amended (42 U.S.C. 2111, 2201, 2232, 2233); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273); §§ 35.11, 35.13, 35.20 (a) and (b), 35.21 (a) and (b), 35.22, 35.23, 35.25, 35.27 (a), (c) and (d), 35.31(a), 35.49, 35.50 (a)-(d), 35.51 (a)-(c), 35.53 (a) and (b), 35.59 (a)-(c), (e)(1), (g) and (h), 35.60, 35.61, 35.70 (a)-(f), 35.75, 35.80 (a)-(e), 35.90, 35.92(a), 35.120, 35.200(b) and (c), 35.204 (a) and (b), 35.205, 35.220, 35.300, 35.310(a), 35.315, 35.320, 35.400, 35.404(a), 35.406 (a) and (c), 35.410(a), 35.415, 35.420, 35.500, 35.520, 35.605, 35.606, 35.610 (a) and (b), 35.615, 35.620, 35.630 (a) and (b), 35.632 (a)-(f), 35.634 (a)-(e), 35.636 (a) and (b), 35.641 (a) and (b), 35.643 (a) and (b), 35.645 (a) and (b), 35.900, 35.910, 35.920, 35.930, 35.932, 35.934, 35.940, 35.941, 35.950, 35.960, 35.961, 35.970, and 35.971 are issued under sec. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201(b)); and §§ 35.14, 35.21(b), 35.22(b), 35.23(b), 35.27 (a) and (c), 35.29(b), 35.33 (a)-(e), 35.36(b), 35.50(e), 35.51(d), 35.53(c), 35.59 (d) and (e)(2), 35.59 (g) and (i), 35.70(g), 35.80(f), 35.92(b), 34.200(c), 35.204(c), 34.300(b), 35.310(b), 35.315(b), 35.404(b), 35.406 (b) and (d), 35.410(b), 35.415(b), 35.610(c), 35.615(d)(4), 35.630(c), 35.632(g), 35.634(f), 35.636(c), 35.641(c), 35.643(c), 35.645, and 35.647(c) are issued under sec. 161o, 68 Stat. 950 as amended (42 U.S.C. 2201(o)).

SOURCE: 51 FR 36951, Oct. 16, 1986, unless otherwise noted.

Subpart A—General Information

§ 35.1 Purpose and scope.

This part prescribes requirements and provisions for the medical use of byproduct material and for issuance of specific licenses authorizing the medical use of this material. These requirements and provisions provide for the protection of the public health and safety. The requirements and provisions of this part are in addition to, and not in substitution for, others in this chapter. The requirements and provisions of Parts 19, 20, 21, 30, 71, and 170 of this chapter apply to applicants and licensees subject to this part unless specifically exempted.

§ 35.2 Definitions.

"Address of use" means the building or buildings that are identified on the license and where byproduct material may be received, used, or stored.

"Agreement State" means any State with which the Commission or the Atomic Energy Commission has entered into an effective agreement under subsection 274b of the Atomic Energy Act of 1954, as amended.

"ALARA" (as low as reasonably achievable) means making every reasonable effort to maintain exposures to radiation as far below the dose limits as is practical:

(1) Consistent with the purpose for which the licensed activity is undertaken,

(2) Taking into account the state of technology, the economics of improvements in relation to benefits to the public health and safety, and other societal and socioeconomic considerations, and

(3) In relation to utilization of nuclear energy in the public interest.

"Area of use" means a portion of an address of use that has been set aside for the purpose of receiving, using, or storing byproduct material.

"Authorized user" means a physician, dentist, or podiatrist who is identified as an authorized user on a Commission or Agreement State license that authorizes the medical use of byproduct material.

"Brachytherapy source" means an individual sealed source or a manufacturer-assembled source train that is not designed to be disassembled by the user.

"Dedicated check source" means a radioactive source that is used to assure the constant operation of a radiation detection or measurement device over several months or years.

"Dental use" means the intentional external administration of the radiation from byproduct material to human beings in the practice of dentistry in accordance with a license issued by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico.

"Dentist" means an individual licensed by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to practice dentistry.

"Management" means the chief executive officer or that person's delegate or delegates.

"Medical Institution" means an organization in which several medical disciplines are practiced.

"Medical use" means the intentional internal or external administration of byproduct material, or the radiation therefrom, to human beings in the practice of medicine in accordance with a license issued by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico.

"Ministerial change" means a change that is made, after ascertaining the applicable requirements, by persons in authority in conformance with the requirements and without making a discretionary judgment about whether those requirements should apply in the case at hand.

"Misadministration" means the administration of:

(1) A radiopharmaceutical or radiation from a sealed source other than the one intended;

(2) A radiopharmaceutical or radiation to the wrong patient;

(3) A radiopharmaceutical or radiation by a route of administration other than that intended by the prescribing physician;

(4) A diagnostic dosage of a radiopharmaceutical differing from the prescribed dosage by more than 50 percent;

(5) A therapy dosage of a radiopharmaceutical differing from the prescribed dosage by more than 10 percent; or

(6) A therapy radiation dose from a sealed source such that errors in the source calibration, time of exposure, and treatment geometry result in a calculated total treatment dose differing from the final prescribed total treatment dose by more than 10 percent.

"Mobile nuclear medicine service" means the transportation and medical use of byproduct material.

"Output" means the exposure rate, dose rate, or a quantity related in a known manner to these rates from a teletherapy unit for a specified set of exposure conditions.

"Physician" means a medical doctor or doctor of osteopathy licensed by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to prescribe drugs in the practice of medicine.

"Podiatric use" means the intentional external administration of the radiation from byproduct material to human beings in the practice of podiatry in accordance with a license issued by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico.

"Podiatrist" means an individual licensed by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to practice podiatry.

"Radiation Safety Officer" means the individual identified as the Radiation Safety Officer on a Commission license.

"Sealed source" means any byproduct material that is encased in a capsule designed to prevent leakage or escape of the byproduct material.

"Teletherapy physicist" means the individual identified as the teletherapy physicist on a Commission license.

"Visiting authorized user" means an authorized user who is not identified as an authorized user on the license of the licensee being visited.

§ 35.5 Maintenance of records.

Each record required by this part must be legible throughout the retention period specified by each Commission regulation. The record may be the original or a reproduced copy or a microform provided that the copy or microform is authenticated by authorized personnel and that the microform is capable of producing a clear copy throughout the required retention period. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records such as letters, drawings, specifications, must include all pertinent information such as stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.

[53 FR 19247, May 27, 1988]

§ 35.8 Information collection requirements: OMB approval.

(a) The Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). OMB has approved the information collection requirements in this part under control number 3150-0010.

(b) The approved information collection requirements contained in this part appear in §§ 35.12, 35.13, 35.14, 35.21, 35.22, 35.23, 35.27, 35.29, 35.31, 35.33, 35.50, 35.51, 35.53, 35.59, 35.60, 35.61, 35.70, 35.80, 35.92, 35.200, 35.204, 35.205, 35.300, 35.310, 35.315, 35.404, 35.406, 35.410, 35.415, 35.606, 35.610, 35.615, 35.630, 35.632, 35.634, 35.636, 35.641, 35.643, 35.645, and 35.647.

(c) This part contains information collection requirements in addition to those approved under the control number specified in paragraph (a) of this section. These information collection requirements and the control numbers under which they are approved as follows:

(1) In § 35.12, Form NRC-313 is approved under control number 3150-0120.

[51 FR 36951, Oct. 16, 1986, as amended at 55 FR 34518, Aug. 23, 1990]

EFFECTIVE DATE NOTE:: At 55 FR 34518, Aug. 23, 1990, § 35.8 was amended by revising paragraph (b), effective from August 23, 1990 to August 23, 1993.

§ 35.11 License required.

(a) A person shall not manufacture, produce, acquire, receive, possess, use, or transfer byproduct material for medical use except in accordance with a specific license issued by the Commission or an Agreement State, or as allowed in paragraph (b) of this section.

(b) An individual may receive, possess, use, or transfer byproduct material in accordance with the regulations in this chapter under the supervision of an authorized user as provided in § 35.25, unless prohibited by license condition.

§ 35.12 Application for license, amendment, or renewal.

(a) If the application is for medical use sited in a medical institution, only the institution's management may apply. If the application is for medical use not sited in a medical institution, any person may apply.

(b) An application for a license for medical use of byproduct material as described in §§ 35.100, 35.200, 35.300, 35.400, and 35.500 of this part must be made by filing an original and one copy of Form NRC-313, "Application for Materials License." For guidance in completing the form, refer to the instructions in the most current versions of the appropriate Regulatory Guides. A request for a license amendment or renewal may be submitted as an original and one copy in letter format.

(c) An application for a license f medical use of byproduct material described in § 35.600 of this part mu be made by filing an original and on copy of Form NRC-313. For guidanc in completing the form, refer to th instructions in the most current ve sion of the appropriate Regulator Guide. A request for a license amend ment or renewal may be submitted a an original and one copy in lette format.

(d) For copies of regulatory guide application forms, or to submit an ap plication or an amendment request refer to § 30.6 of this chapter.

§ 35.13 License amendments.

A licensee shall apply for and mus receive a license amendment:

(a) Before it receives or uses byproduct material for a clinical procedure permitted under this Part but not permitted by the license issued pursuant to this part;

(b) Before it permits anyone, except a visiting authorized user described in § 35.27, to work as an authorized user under the license;

(c) Before it changes Radiation Safety Officers or Teletherapy Physicists;

(d) Before it orders byproduct material in excess of the amount, or radionuclide or form different than authorized on the license; and

(e) Before it adds to or changes the areas of use or address or addresses of use identified in the application or on the license.

§ 35.14 Notifications.

A licensee shall notify the Commission by letter within thirty days when an authorized user, Radiation Safety Officer, or Teletherapy Physicist permanently discontinues performance of duties under the license or has a name change, or when the licensee's mailing address changes. The licensee shall mail the report to the appropriate address identified in § 30.6 of this chapter.

§ 35.18 License issuance.

The Commission shall issue a license for the medical use of byproduct material for a term of five years if:

(a) The applicant has filed Form NRC-313 "Application for Materials License" in accordance with the instructions in § 35.12;

(b) The applicant has paid any applicable fee as provided in Part 170 of this chapter;

(c) The Commission finds the applicant equipped and committed to observe the safety standards established by the Commission in this Chapter for the protection of the public health and safety; and

(d) The applicant meets the requirements of Part 30 of this chapter.

§ 35.19 Specific exemptions.

The Commission may, upon application of any interested person or upon its own initiative, grant such exemptions from the regulations in this part as it determines are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest. The Commission will review requests for exemptions from training and experience requirements with the assistance of its Advisory Committee on the Medical Uses of Isotopes.

Subpart B—General Administrative Requirements

§ 35.20 ALARA program.

(a) Each licensee shall develop and implement a written radiation protection program that includes provisions for keeping doses ALARA.

(b) To satisfy the requirement of paragraph (a) of this section:

(1) At a medical institution, management, the Radiation Safety Officer, and all authorized users must participate in the program as requested by the Radiation Safety Committee.

(2) For licensees that are not medical institutions, management and all authorized users must participate in the program as requested by the Radiation Safety Officer.

(c) The program must include notice to workers of the program's existence and workers' responsibility to help keep dose equivalents ALARA, a review of summaries of the types and amounts of byproduct material used, occupational doses, changes in radiation safety procedures and safety measures, and continuing education and training for all personnel who work with or in the vicinity of byproduct material. The purpose of the review is to ensure that licensees make a reasonable effort to maintain individual and collective occupational doses ALARA.

§ 35.21 Radiation Safety Officer.

(a) A licensee shall appoint a Radiation Safety Officer responsible for implementing the radiation safety program. The licensee, through the Radiation Safety Officer, shall ensure that radiation safety activities are being performed in accordance with approved procedures and regulatory requirements in the daily operation of the licensee's byproduct material program.

(b) The Radiation Safety Officer shall:

(1) Investigate overexposures, accidents, spills, losses, thefts, unauthorized receipts, uses, transfers, disposals, misadministrations, and other deviations from approved radiation safety practice and implement corrective actions as necessary;

(2) Establish, collect in one binder or file, and implement written policy and procedures for:

(i) Authorizing the purchase of byproduct material;

(ii) Receiving and opening packages of byproduct material;

(iii) Storing byproduct material;

(iv) Keeping an inventory record of byproduct material;

(v) Using byproduct material safely;

(vi) Taking emergency action if control of byproduct material is lost;

(vii) Performing periodic radiation surveys;

(viii) Performing checks of survey instruments and other safety equipment;

(ix) Disposing of byproduct material;

(x) Training personnel who work in or frequent areas where byproduct material is used or stored;

(xi) Keeping a copy of all records and reports required by the Commission regulations, a copy of these regulations, a copy of each licensing request and license and amendments, and the written policy and procedures required by the regulations.

(3) Brief management once each year on the byproduct material program;

(4) Establish personnel exposure investigational levels that, when exceeded, will initiate an investigation by the Radiation Safety Officer of the cause of the exposure;

(5) Establish personnel exposure investigational levels that, when exceeded, will initiate a prompt investigation by the Radiation Safety Officer of the cause of the exposure and a consideration of actions that might be taken to reduce the probability of recurrence;

(6) For medical use not at a medical institution, approve or disapprove minor changes in radiation safety procedures that are not potentially important to safety with the advice and consent of management; and

(7) For medical use at a medical institution, assist the Radiation Safety Committee in the performance of its duties.

§ 35.22 Radiation Safety Committee.

Each medical institution licensee shall establish a Radiation Safety Committee to oversee the use of byproduct material.

(a) Each Committee must meet the following administrative requirements:

(1) Membership must consist of at least three individuals and must include an authorized user of each type of use permitted by the license, the Radiation Safety Officer, a representative of the nursing service, and a representative of management who is neither an authorized user nor a Radiation Safety Officer. Other members may be included as the licensee deems appropriate.

(2) The Committee must meet at least quarterly.

(3) To establish a quorum and to conduct business, at least one-half of the Committee's membership must be present, including the Radiation Safety Officer and the management's representative.

(4) The minutes of each Radiation Safety Committee meeting must include:

(i) The date of the meeting;

(ii) Members present;

(iii) Members absent;

(iv) Summary of deliberations and discussions;

(v) Recommended actions and the numerical results of all ballots; and

(vi) ALARA program reviews described in § 35.20(c).

(5) The Committee must promptly provide each member with a copy of the meeting minutes, and retain one copy for the duration of the license.

(b) To oversee the use of licensed material, the Committee must:

(1) Review recommendations on ways to maintain individual and collective doses ALARA;

(2) Review, on the basis of safety and with regard to the training and experience standards in Subpart J of this part, and approve or disapprove any individual who is to be listed as an authorized user, the Radiation Safety Officer, or a Teletherapy Physicist before submitting a license application or request for amendment or renewal;

(3) Review on the basis of safety, and approve with the advice and consent of the Radiation Safety Officer and the management representative, or disapprove minor changes in radiation safety procedures that are not potentially important to safety and are permitted under § 35.31 of this Part;

(4) Review quarterly, with the assistance of the Radiation Safety Officer, a summary of the occupational radiation dose records of all personnel working with byproduct material;

(5) Review quarterly, with the assistance of the Radiation Safety Officer, all incidents involving byproduct material with respect to cause and subsequent actions taken; and

(6) Review annually, with the assistance of the Radiation Safety Officer, the radiation safety program.

§ 35.23 Statements of authority and responsibilities.

(a) A licensee shall provide the Radiation Safety Officer, and at a medical institution the Radiation Safety Committee, sufficient authority, organizational freedom, and management prerogative, to:

(1) Identify radiation safety problems;

(2) Initiate, recommend, or provide corrective actions; and

(3) Verify implementation of corrective actions.

(b) A licensee shall establish and state in writing the authorities, duties, responsibilities, and radiation safety activities of the Radiation Safety Officer, and at a medical institution the Radiation Safety Committee, and retain the current edition of these statements as a record until the Commission terminates the license.

§ 35.25 Supervision.

(a) A licensee that permits the receipt, possession, use, or transfer of byproduct material by an individual under the supervision of an authorized user as allowed by § 35.11(b) of this part shall:

(1) Instruct the supervised individual in the principles of radiation safety appropriate to that individual's use of byproduct material;

(2) Require the supervised individual to follow the instructions of the supervising authorized user, follow the procedures established by the Radiation Safety Officer, and comply with the regulations of this chapter and the license conditions with respect to the use of byproduct material; and

(3) Periodically review the supervised individual's use of byproduct material and the records kept to reflect this use.

(b) A licensee that supervises an individual is responsible for the acts and omissions of the supervised individual.

§ 35.27 Visiting authorized user.

(a) A licensee may permit any visiting authorized user to use licensed material for medical use under the terms of the licensee's license for sixty days each year if:

(1) The visiting authorized user has the prior written permission of the licensee's management and, if the use occurs on behalf of an institution, the institution's Radiation Safety Committee;

(2) The licensee has a copy of a license issued by the Commission or an Agreement State, or a permit issued by a Commission or Agreement State broad licensee that is authorized to permit medical use, that identifies the visiting authorized user by name as an authorized user for medical use; and

(3) Only those procedures for which the visiting authorized user is specifically authorized by the license or permit are performed by that individual.

(b) A licensee need not apply for a license amendment in order to permit a visiting authorized user to use licensed material as described in paragraph (a) of this section.

(c) A licensee shall retain the records specified in this section for three years after the visiting authorized user's last use of licensed material, but may discard the records if the visiting authorized user has been listed as an authorized user on the licensee's license.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.29 Administrative requirements that apply to the provision of mobile nuclear medicine service.

(a) The Commission will license mobile nuclear medicine service only in accordance with Subparts D, E and H of this part and § 31.11 of this chapter.

(b) Mobile nuclear medicine service licensees shall obtain a letter signed by the management of each client for which services are rendered that authorizes use of byproduct material at the client's address of use. The mobile nuclear medicine service licensee shall retain the letter for three years after the last provision of service.

(c) If a mobile nuclear medicine service provides services that the client is also authorized to provide, the client is responsible for assuring that services are conducted in accordance with the regulations in this chapter while the mobile nuclear medicine service is under the client's direction.

(d) A mobile nuclear medicine service may not order byproduct material to be delivered directly from the manufacturer or distributor to the client's address of use.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.31 Radiation safety program changes.

(a) A licensee may make minor changes in radiation safety procedures that are not potentially important to safety, i.e., ministerial changes, that were described in the application for license, renewal, or amendment except for those changes in §§ 35.13 and 35.606 of this part. Examples of such ministerial changes include: editing of procedures for clarity or conformance with local drafting policy or updating names, telephone numbers, and addresses; adoption of model radiation safety procedures published in NRC Regulatory Guides; replacement of equipment; reassignment of tasks among employees; or assignment of service contracts for services such as personnel dosimetry, radiation safety equipment repair or calibration, waste disposal, and safety surveys. A licensee is responsible for assuring that any change made is in compliance with the requirements of the regulations and the license.

(b) A licensee shall retain a record of each change until the license has been renewed or terminated. The record must include the effective date of the change, a copy of the old and new radiation safety procedures, the reason for the change, a summary of radiation safety matters that were considered before making the change, the signature of the Radiation Safety Officer, and the signatures of the affected authorized users and of management or, in a medical institution, the Radiation Safety Committee's chairman and the management representative.

§ 35.33 Records and reports of misadministrations.

(a) When a misadministration involves any therapy procedure, the licensee shall notify by telephone the appropriate NRC Regional Office listed in Appendix D of Part 20 of this chapter. The licensee shall also notify the referring physician of the affected patient and the patient or a responsible relative (or guardian), unless the referring physician agrees to inform the patient or believes, based on medical judgment, that telling the patient or the patient's responsible relative (or guardian) would be harmful to one or the other, respectively. These notifications must be made within 24 hours after the licensee discovers the misadministration. If the referring physician, patient, or the patient's responsible relative or guardian cannot be reached within 24 hours, the licensee shall notify them as soon as practicable. The licensee is not required to notify the patient or the patient's responsible relative or guardian without first consulting the referring physician; however, the licensee shall not delay medical care for the patient because of this.

(b) Within 15 days after an initial therapy misadministration report to NRC, the licensee shall report, in writing, to the NRC Regional Office initially telephoned and to the referring physician, and furnish a copy of the report to the patient or the patient's responsible relative (or guardian) if either was previously notified by the licensee under paragraph (a) of this section. The written report must include the licensee's name; the referring physician's name; a brief description of the event; the effect on the patient; the action taken to prevent recurrence; whether the licensee informed the patient or the patient's responsible relative (or guardian), and if not, why not. The report must not include the patient's name or other information that could lead to identification of the patient.

(c) When a misadministration involves a diagnostic procedure, the Radiation Safety Officer shall promptly investigate its cause, make a record for NRC review, and retain the record as directed in § 35.33(d). The licensee shall also notify the referring physician and the appropriate NRC Office specified in § 30.6 of this part in writing on Form NRC 473 within 15 days if the misadministration involved the use of byproduct material not intended for medical use, administration of a dosage five-fold different from the intended dosage, or administration of byproduct material such that the patient is likely to receive an organ dose greater than 2 rem or a whole body dose greater than 500 millirem. Licensees may use dosimetry tables in package inserts, corrected only for amount of radioactivity administered, to determine whether a report is required.

(d) Each licensee shall retain a record of each misadministration for ten years. The record must contain the names of all individuals involved in the event (including the physician, allied health personnel, the patient, and the patient's referring physician), the patient's social security number or identification number if one has been assigned, a brief description of the event, the effect on the patient, and the action taken, if any, to prevent recurrence.

(e) Aside from the notification requirement, nothing in this section affects any rights or duties of licensees and physicians in relation to each other, patients, or responsible relatives (or guardians).

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 21627, June 9, 1988]

§ 35.49 Suppliers.

A licensee may use for medical use only:

(a) Byproduct material manufactured, labeled, packaged, and distributed in accordance with a license issued pursuant to the regulations in Part 30 and §§ 32.72, 32.73, or 32.74 of this chapter or the equivalent regulations of an Agreement State;

(b) Reagent kits that have been manufactured, labeled, packaged, and distributed in accordance with an approval by the Commission pursuant to § 32.73 or an Agreement State under equivalent regulations for the preparation of radiopharmaceuticals for medical use; and

(c) Teletherapy sources manufactured and distributed in accordance with a license issued pursuant to Part 30 of this chapter or the equivalent regulations of an Agreement State.

Subpart C—General Technical Requirements

§ 35.50 Possession, use, calibration, and check of dose calibrators.

(a) A medical use licensee authorized to administer radiopharmaceuticals shall have in its possession a dose calibrator and use it to measure the amount of activity administered to each patient.

(b) A licensee shall:

(1) Check each dose calibrator for constancy with a dedicated check source at the beginning of each day of use. To satisfy the requirement of this paragraph, the check must be done on a frequently used setting with a sealed source of not less than 10 microcuries of radium-226 or 50 microcuries of any other photon-emitting radionuclide;

(2) Test each dose calibrator for accuracy upon installation and at least annually thereafter by assaying at least two sealed sources containing different radionuclides whose activity the manufacturer has determined within 5 percent of its stated activity, whose activity is at least 10 microcuries for radium-226 and 50 microcuries for any other photon-emitting radionuclide, and at least one of which has a principal photon energy between 100 keV and 500 keV;

(3) Test each dose calibrator for linearity upon installation and at least quarterly thereafter over the range of its use between the highest dosage that will be administered to a patient and 10 microcuries; and

(4) Test each dose calibrator for geometry dependence upon installation over the range of volumes and volume configurations for which it will be used. The licensee shall keep a record of this test for the duration of the use of the dose calibrator.

(c) A licensee shall also perform appropriate checks and tests required by this section following adjustment or repair of the dose calibrator.

(d) A licensee shall mathematically correct dosage readings for any geometry or linearity error that exceeds 10 percent if the dosage is greater than 10 microcuries and shall repair or replace the dose calibrator if the accuracy or constancy error exceeds 10 percent.

(e) A licensee shall retain a record of each check and test required by this section for three years unless directed otherwise. The records required in paragraphs (b)(1) through (b)(4) of this section must include:

(1) For paragraph (b)(1) of this section, the model and serial number of the dose calibrator, the identity of the

radionuclide contained in the check source, the date of the check, the activity measured, and the initials of the individual who performed the check;

(2) For paragraph (b)(2) of this section, the model and serial number of the dose calibrator, the model and serial number of each source used and the identity of the radionuclide contained in the source and its activity, the date of the test, the results of the test, and the signature of the Radiation Safety Officer;

(3) For paragraph (b)(3) of this section, the model and serial number of the dose calibrator, the calculated activities, the measured activities, the date of the test, and the signature of the Radiation Safety Officer; and

(4) For paragraph (b)(4) of this section, the model and serial number of the dose calibrator, the configuration of the source measured, the activity measured for each volume measured, the date of the test, and the signature of the Radiation Safety Officer.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.51 Calibration and check of survey instruments.

(a) A licensee shall calibrate the survey instruments used to show compliance with this part before first use, annually, and following repair. The licensee shall:

(1) Calibrate all scales with readings up to 1000 millirem per hour with a radiation source;

(2) Calibrate two separated readings on each scale that must be calibrated; and

(3) Conspicuously note on the instrument the apparent exposure rate from a dedicated check source as determined at the time of calibration, and the date of calibration.

(b) When calibrating a survey instrument, the licensee shall consider a point as calibrated if the indicated exposure rate differs from the calculated exposure rate by not more than 20 percent, and shall conspicuously attach a correction chart or graph to the instrument.

(c) A licensee shall check each survey instrument for proper operation with the dedicated check source each day of use. A licensee is not required to keep records of these checks.

(d) A licensee shall retain a record of each survey instrument calibration for three years. The record must include:

(1) A description of the calibration procedure; and

(2) The date of the calibration, a description of the source used and the certified exposure rates from the source, and the rates indicated by the instrument being calibrated, the correction factors deduced from the calibration data, and the signature of the individual who performed the calibration.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.53 Measurement of radiopharmaceutical dosages.

A licensee shall:

(a) Measure the activity of each radiopharmaceutical dosage that contains more than 10 microcuries of a photon-emitting radionuclide before medical use;

(b) Measure the activity of each radiopharmaceutical dosage with a desired activity of 10 microcuries or less of a photon-emitting radionuclide before medical use to verify that the dosage does not exceed 10 microcuries;

(c) Retain a record of the measurements required by this section for three years. To satisfy this requirement, the record must contain the:

(1) Generic name, trade name, or abbreviation of the radiopharmaceutical, its lot number, and expiration dates and the radionuclide;

(2) Patient's name, and identification number if one has been assigned;

(3) Prescribed dosage and activity of the dosage at the time of measurement, or a notation that the total activity is less than 10 microcuries;

(4) Date and time of the measurement; and

(5) Initials of the individual who made the record.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.57 Authorization for calibration and reference sources.

Any person authorized by § 35.11 of this Part for medical use of byproduct material may receive, possess, and use the following byproduct material for check, calibration, and reference use:

(a) Sealed sources manufactured and distributed by a person licensed pursuant to § 32.74 of this chapter or equivalent Agreement State regulations and that do not exceed 15 millicuries each;

(b) Any byproduct material listed in §§ 35.100 or 35.200 with a half-life not longer than 100 days in individual amounts not to exceed 15 millicuries;

(c) Any byproduct material listed in §§ 35.100 or 35.200 with a half-life longer than 100 days in individual amounts not to exceed 200 microcuries each; and

(d) Technetium-99m in individual amounts not to exceed 50 millicuries.

§ 35.59 Requirements for possession of sealed sources and brachytherapy sources.

(a) A licensee in possession of any sealed source or brachytherapy source shall follow the radiation safety and handling instructions supplied by the manufacturer, and shall maintain the instructions for the duration of source use in a legible form convenient to users.

(b) A licensee in possession of a sealed source shall:

(1) Test the source for leakage before its first use unless the licensee has a certificate from the supplier indicating that the source was tested within six months before transfer to the licensee; and

(2) Test the source for leakage at intervals not to exceed six months or at other intervals approved by the Commission or an Agreement State and described in the label or brochure that accompanies the source.

(c) To satisfy the leak test requirements of this section, the licensee must:

(1) Take a wipe sample from the sealed source or from the surfaces of the device in which the sealed source is mounted or stored on which radioactive contamination might be expected to accumulate or wash the source in a small volume of detergent solution and treat the entire volume as the sample;

(2) Take teletherapy and other device source test samples when the source is in the "off" position; and

(3) Measure the sample so that the leakage test can detect the presence of 0.005 microcuries of radioactive material on the sample.

(d) A licensee shall retain leakage test records for five years. The records must contain the model number, and serial number if assigned, of each source tested, the identity of each source radionuclide and its estimated activity, the measured activity of each test sample expressed in microcuries, a description of the method used to measure each test sample, the date of the test, and the signature of the Radiation Safety Officer.

(e) If the leakage test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall:

(1) Immediately withdraw the sealed source from use and store it in accordance with the requirements in Parts 20 and 30 of this chapter; and

(2) File a report within five days of the leakage test with the appropriate NRC Office listed in § 30.6 of this chapter, with a copy to Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, describing the equipment involved, the test results, and the action taken.

(f) A licensee need not perform a leakage test on the following sources:

(1) Sources containing only byproduct material with a half-life of less than 30 days;

(2) Sources containing only byproduct material as a gas;

(3) Sources containing 100 microcuries or less of beta or gamma-emitting material or 10 microcuries or less of alpha-emitting material;

(4) Sources stored and not being used. The licensee shall, however, test each such source for leakage before any use or transfer unless it has been leakage-tested within six months before the date of use or transfer; and

(5) Seeds of iridium-192 encased in nylon ribbon.

(g) A licensee in possession of a sealed source or brachytherapy source shall conduct a quarterly physical inventory of all such sources in its possession. The licensee shall retain each inventory record for five years. The inventory records must contain the model number of each source, and serial number if one has been assigned, the identity of each source radionuclide and its nominal activity, the location of each source, and the signature of the Radiation Safety Officer.

(h) A licensee in possession of a sealed source or brachytherapy source shall measure the ambient dose rates quarterly in all areas where such sources are stored. This does not apply to teletherapy sources in teletherapy units or sealed sources in diagnostic devices.

(i) A licensee shall retain a record of each survey required in paragraph (h) of this section for three years. The record must include the date of the survey, a plan of each area that was surveyed, the measured dose rate at several points in each area expressed in millirem per hour, the survey instrument used, and the signature of the Radiation Safety Officer.

[51 FR 36951, Oct. 16, 1986, as amended at 52 FR 31611, Aug. 21, 1987; 53 FR 19247, May 27, 1988]

§ 35.60 Syringe shields and labels.

(a) A licensee shall keep syringes that contain byproduct material to be administered in a radiation shield.

(b) To identify its contents, a licensee shall conspicuously label each syringe, or syringe radiation shield that contains a syringe with a radiopharmaceutical. The label must show the radiopharmaceutical name or its abbreviation, the clinical procedure to be performed, or the patient's name.

(c) A licensee shall require each individual who prepares a radiopharmaceutical kit to use a syringe radiation shield when preparing the kit and shall require each individual to use a syringe radiation shield when administering a radiopharmaceutical by injection unless the use of the shield is contraindicated for that patient.

§ 35.61 Vial shields and labels.

(a) A licensee shall require each individual preparing or handling a vial that contains a radiopharmaceutical to keep the vial in a vial radiation shield.

(b) To identify its contents, a licensee shall conspicuously label each vial radiation shield that contains a vial of a radiopharmaceutical. The label must show the radiopharmaceutical name or its abbreviation.

§ 35.70 Surveys for contamination and ambient radiation exposure rate.

(a) A licensee shall survey with a radiation detection survey instrument at the end of each day of use all areas where radiopharmaceuticals are routinely prepared for use or administered.

(b) A licensee shall survey with a radiation detection survey instrument at least once each week all areas where radiopharmaceuticals or radiopharmaceutical waste is stored.

(c) A licensee shall conduct the surveys required by paragraphs (a) and (b) of this section so as to be able to detect dose rates as low as 0.1 millirem per hour.

(d) A licensee shall establish radiation dose rate trigger levels for the surveys required by paragraphs (a) and (b) of this section. A licensee shall require that the individual performing the survey immediately notify the Radiation Safety Officer if a dose rate exceeds a trigger level.

(e) A licensee shall survey for removable contamination once each week all areas where radiopharmaceuticals are routinely prepared for use, administered, or stored.

(f) A licensee shall conduct the surveys required by paragraph (e) of this section so as to be able to detect contamination on each wipe sample of 2000 disintegrations per minute.

(g) A licensee shall establish removable contamination trigger levels for the surveys required by paragraph (e) of this section. A licensee shall require that the individual performing the survey immediately notify the Radiation Safety Officer if contamination exceeds the trigger level.

(h) A licensee shall retain a record of each survey for three years. The record must include the date of the survey, a plan of each area surveyed, the trigger level established for each area, the detected dose rate at several points in each area expressed in millirem per hour or the removable contamination in each area expressed in disintegrations per minute per 100 square centimeters, the instrument used to make the survey or analyze the samples, and the initials of the individual who performed the survey.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.75 Release of patients containing radiopharmaceuticals or permanent implants.

(a) A licensee may not authorize release from confinement for medical care any patient administered a radiopharmaceutical until either:

(1) The measured dose rate from the patient is less than 5 millirems per hour at a distance of one meter; or

(2) The activity in the patient is less than 30 millicuries.

(b) A licensee may not authorize release from confinement for medical care of any patient administered a permanent implant until the measured dose rate from the patient is less than 5 millirems per hour at a distance of one meter.

§ 35.80 Technical requirements that apply to the provision of mobile nuclear medicine service.

A licensee providing mobile nuclear medicine service shall:

(a) Transport to each address of use only syringes or vials containing prepared radiopharmaceuticals or radiopharmaceuticals that are intended for reconstitution of radiopharmaceutical kits;

(b) Bring into each address of use all byproduct material to be used and, before leaving, remove all unused byproduct material and all associated waste;

(c) Secure or keep under constant surveillance and immediate control all byproduct material when in transit or at an address of use;

(d) Check survey instruments and dose calibrators as described in §§ 35.50 and 35.51, and check all other transported equipment for proper function before medical use at each address of use;

(e) Carry a radiation detection survey meter in each vehicle that is being used to transport byproduct material, and, before leaving a client address of use, survey all radiopharmaceutical areas of use with a radiation detection survey meter to ensure that all radiopharmaceuticals and all associated waste have been removed;

(f) Retain a record of each survey required in paragraph (e) of this section for three years. The record must include the date of the survey, a plan of each area that was surveyed, the measured dose rate at several points in each area of use expressed in millirem per hour, the instrument used to make the survey, and the initials of the individual who performed the survey.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.90 Storage of volatiles and gases.

A licensee shall store volatile radiopharmaceuticals and radioactive gases in the shipper's radiation shield and container. A licensee shall store a multi-dose container in a fume hood after drawing the first dosage from it.

§ 35.92 Decay-in-storage.

(a) A licensee may hold byproduct material with a physical half-life of less than 65 days for decay-in-storage before disposal in ordinary trash and is exempt from the requirements of § 20.301 of this chapter if it:

(1) Holds byproduct material for decay a minimum of ten half-lives;

(2) Monitors byproduct material at the container surface before disposal as ordinary trash and determines that its radioactivity cannot be distinguished from the background radiation level with a radiation detection survey meter set on its most sensitive scale and with no interposed shielding;

(3) Removes or obliterates all radiation labels; and

(4) Separates and monitors each generator column individually with all radiation shielding removed to ensure that it has decayed to background radiation level before disposal.

(b) A licensee shall retain a record of each disposal permitted under paragraph (a) of this section for three years. The record must include the date of the disposal, the date on which the byproduct material was placed in storage, the radionuclides disposed, the survey instrument used, the background dose rate, the dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

Subpart D—Uptake, Dilution, and Excretion

§ 35.100 Use of radiopharmaceuticals for uptake, dilution and excretion studies.

A licensee may use any byproduct material in a radiopharmaceutical and for a diagnostic use involving measurements of uptake, dilution, or excretion for which the Food and Drug Administration (FDA) has accepted a "Notice of Claimed Investigational Exemption for a New Drug" (IND) or approved a "New Drug Application" (NDA).

§ 35.120 Possession of survey instrument.

A licensee authorized to use byproduct material for uptake, dilution, and excretion studies shall have in its possession a portable radiation detection survey instrument capable of detecting dose rates over the range 0.1 millirem per hour to 100 millirem per hour.

Subpart E—Imaging and Localization

§ 35.200 Use of radiopharmaceuticals, generators, and reagent kits for imaging and localization studies.

(a) A licensee may use any byproduct material in a diagnostic radiopharmaceutical or any generator or reagent kit for preparation and diagnostic use of a radiopharmaceutical containing byproduct material for which the Food and Drug Administration has accepted a "Notice of Claimed Investigational Exemption for a New Drug" (IND) or approved a "New Drug Application" (NDA).

(b) A licensee shall elute generators and prepare reagent kits in accordance with the manufacturer's instructions.

(c)(1) From August 23, 1990, to August 23, 1993, a licensee may depart from the manufacturer's instructions for eluting generators and preparing reagent kits for which FDA has approved an NDA, provided that the licensee has a written directive made by an authorized user physician that directs a specific departure for a particular patient, or patients, or for a radiopharmaceutical, and which includes the specific nature of the departure, a precise description of the departure, and a brief statement of the reasons why the departure from the manufacturer's instructions for preparing the radiopharmaceutical would obtain medical results not otherwise attainable or would reduce medical risks to particular patients because of their medical condition. If the authorized user physician determines that a delay in preparing the radiopharmaceutical in order to make a written directive would jeopardize the patient's health because of the emergency nature of the patient's medical condition, the radiopharmaceutical may be prepared without first making a written directive. The authorized user physician shall make notation of this determination in the written directive within 3 working days after the prescribed departure.

(2) The licensee shall keep the written directive and a record of the number of patient administrations under the departure in an auditable form and available for inspection for a period of 5 years.

(3) Nothing in this section relieves the licensee from complying with other applicable NRC, FDA, and other Federal or State regulations governing the elution of generators and preparation of reagent kits.

[51 FR 36951, Oct. 16, 1986, as amended at 55 FR 34518, Aug. 23, 1990]

Effective Date Note: At 55 FR 34518, Aug. 23, 1990, § 35.200 was amended by adding paragraph (c), effective from August 23, 1990 to August 23, 1993.

§ 35.204 Permissible molybdenum-99 concentration.

(a) A licensee may not administer to humans a radiopharmaceutical containing more than 0.15 microcurie of molybdenum-99 per millicurie of technetium-99m.

(b) A licensee that uses molybdenum-99/technetium-99m generators for preparing a technetium-99m radiopharmaceutical shall measure the molybdenum-99 concentration in each eluate or extract.

(c) A licensee that must measure molybdenum concentration shall retain a record of each measurement for three years. The record must include, for each elution or extraction of technetium-99m, the measured activity of the technetium expressed in millicuries, the measured activity of the molybdenum expressed in microcuries, the ratio of the measures expressed as microcuries of molybdenum per millicurie of technetium, the time and date of the measurement, and the initials of the individual who made the measurement.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.205 Control of aerosols and gases.

(a) A licensee that administers radioactive aerosols or gases shall do so in a room with a system that will keep airborne concentrations within the limits prescribed by §§ 20.103 and 20.106 of this chapter. The system must either be directly vented to the atmosphere through an air exhaust or provide for collection and decay or disposal of the aerosol or gas in a shielded container.

(b) A licensee shall administer radioactive gases only in rooms that are at negative pressure compared to surrounding rooms.

(c) Before receiving, using, or storing a radioactive gas, the licensee shall calculate the amount of time needed after a spill to reduce the concentration in the room to the occupational limit listed in Appendix B to Part 20 of this chapter. The calculation must be based on the highest activity of gas handled in a single container, the air volume of the room, and the measured available air exhaust rate.

(d) A licensee shall make a record of the calculations required in paragraph (c) of this section that includes the assumptions, measurements, and calculations made and shall retain the record for the duration of use of the area. A licensee shall also post the calculated time and safety measures to be instituted in case of a spill at the area of use.

(e) A licensee shall check the operation of reusable collection systems each month, and measure the ventilation rates available in areas of radioactive gas use each six months.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 27667, July 22, 1988]

§ 35.220 Possession of survey instruments.

A licensee authorized to use byproduct material for imaging and localization studies shall have in its possession a portable radiation detection survey instrument capable of detecting dose rates over the range of 0.1 millirem per hour to 100 millirem per hour, and a portable radiation measurement survey instrument capable of measuring dose rates over the range 1 millirem per hour to 1000 millirem per hour.

Subpart F—Radiopharmaceuticals for Therapy

§ 35.300 Use of radiopharmaceuticals for therapy.

(a) A licensee may use any byproduct material in a radiopharmaceutical and for a therapeutic use for which the Food and Drug Administration has accepted a "Notice of Claimed Investigational Exemption for a New Drug" (IND), or approved a "New Drug Application" (NDA). The licensee shall comply with the package insert instructions regarding indications and method of administration.

(b)(1) From August 23, 1990, to August 23, 1993, a licensee may depart from the package insert instructions regarding indications or method of administration for a radiopharmaceutical for which FDA has approved an NDA, provided that the authorized user physician makes a record of the departure which includes the specific nature of the departure and a brief statement of the reasons why the departure would obtain medical results not otherwise attainable or would reduce medical risks to particular patients because of their medical condition. Licensees are not authorized to depart from the manufacturer's instructions for eluting a generator or preparing any kit for a radiopharmaceutical for therapy.

(2) The licensee shall obtain this record within 3 working days of the administration and keep this record and a record of the number of patient administrations under the departure in an auditable form and available for inspection for 5 years.

(3) Nothing in this section relieves the licensee from complying with other applicable NRC, FDA (including requirements governing the submission of an IND), and other Federal or State regulations governing the use of radiopharmaceuticals for therapy.

[51 FR 36951, Oct. 16, 1986, as amended at 55 FR 34518, Aug. 23, 1990]

EFFECTIVE DATE NOTE: At 55 FR 34518, Aug. 23, 1990, § 35.300 was amended by designating existing text as paragraph (a) and adding paragraph (b), effective from August 23, 1990 to August 23, 1993.

§ 35.310 Safety instruction.

(a) A licensee shall provide radiation safety instruction for all personnel caring for the patient receiving radiopharmaceutical therapy and hospitalized for compliance with § 35.75 of this chapter. To satisfy this requirement, the instruction must describe the licensee's procedures for:

(1) Patient control;

(2) Visitor control;

(3) Contamination control;

(4) Waste control; and

(5) Notification of the Radiation Safety Officer in case of the patient's death or medical emergency.

(b) A licensee shall keep for three years a list of individuals receiving instruction required by paragraph (a) of this section, a description of the instruction, the date of instruction, and the name of the individual who gave the instruction.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.315 Safety precautions.

(a) For each patient receiving radiopharmaceutical therapy and hospitalized for compliance with § 35.75 of this chapter, a licensee shall:

(1) Provide a private room with a private sanitary facility;

(2) Post the patient's door with a "Radioactive Materials" sign and note on the door or in the patient's chart where and how long visitors may stay in the patient's room;

(3) Authorize visits by individuals under age 18 only on a patient-by-patient basis with the approval of the authorized user after consultation with the Radiation Safety Officer;

(4) Promptly after administration of the dosage, measure the dose rates in contiguous restricted and unrestricted areas with a radiation measurement survey instrument to demonstrate compliance with the requirements of Part 20 of this chapter, and retain for three years a record of each survey that includes the time and date of the survey, a plan of the area or list of points surveyed, the measured dose rate at several points expressed in millirem per hour, the instrument used to make the survey, and the initials of the individual who made the survey.

(5) Either monitor material and items removed from the patient's room to determine that their radioactivity cannot be distinguished from the natural background radiation level with a radiation detection survey instrument set on its most sensitive scale and with no interposed shielding, or handle them as radioactive waste.

(6) Provide the patient with radiation safety guidance that will help to keep radiation dose to household members and the public as low as reasonably achievable before authorizing release of the patient.

(7) Survey the patient's room and private sanitary facility for removable contamination with a radiation detection survey instrument before assigning another patient to the room. The room must not be reassigned until removable contamination is less than 200 disintegrations per minute per 100 square centimeters; and

(8) Measure the thyroid burden of each individual who helped prepare or administer a dosage of iodine-131 within three days after administering the dosage, and retain for the period required by § 20.401(c)(1) a record of each thyroid burden measurement, its date, the name of the individual whose thyroid burden was measured, and the initials of the individual who made the measurements.

(b) A licensee shall notify the Radiation Safety Officer immediately if the patient dies or has a medical emergency.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.320 Possession of survey instruments.

A licensee authorized to use byproduct material for radiopharmaceutical therapy shall have in its possession a portable radiation detection survey instrument capable of detecting dose rates over the range 0.1 millirem per hour to 100 millirem per hour, and a portable radiation measurement survey instrument capable of measuring dose rates over the range 1 millirem per hour to 1000 millirem per hour.

Subpart G—Sources for Brachytherapy

§ 35.400 Use of sources for brachytherapy.

A licensee shall use the following sources in accordance with the manufacturer's radiation safety and handling instructions:

(a) Cesium-137 as a sealed source in needles and applicator cells for topical, interstitial, and intracavitary treatment of cancer;

(b) Cobalt-60 as a sealed source in needles and applicator cells for topical, interstitial, and intracavitary treatment of cancer;

(c) Gold-198 as a sealed source in seeds for interstitial treatment of cancer;

(d) Iridium-192 as seeds encased in nylon ribbon for interstitial treatment of cancer;

(e) Strontium-90 as a sealed source in an applicator for treatment of superficial eye conditions; and

(f) Iodine-125 as a sealed source in seeds for interstitial treatment of cancer.

(g) Palladium-103 as a sealed source in seeds for interstitial treatment of cancer.

[51 FR 36951, Oct. 16, 1986, as amended at 54 FR 41821, Oct. 12, 1989]

§ 35.404 Release of patients treated with temporary implants.

(a) Immediately after removing the last temporary implant source from a patient, the licensee shall make a radiation survey of the patient with a radiation detection survey instrument to confirm that all sources have been removed. The licensee may not release from confinement for medical care a patient treated by temporary implant until all sources have been removed.

(b) A licensee shall retain a record of patient surveys for three years. Each record must include the date of the survey, the name of the patient, the dose rate from the patient expressed as millirem per hour and measured at one meter from the patient, the survey instrument used, and the initials of the individual who made the survey.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.406 Brachytherapy sources inventory.

(a) Promptly after removing them from a patient, a licensee shall return brachytherapy sources to the storage area, and count the number returned to ensure that all sources taken from the storage area have been returned.

(b) A licensee shall make a record of brachytherapy source use which must include:

(1) The names of the individuals permitted to handle the sources,

(2) The number and activity of sources removed from storage, the patient's name and room number, the time and date they were removed from storage, the number and activity of the sources in storage after the removal, and the initials of the individual who removed the sources from storage;

(3) The number and activity of sources returned to storage, the patient's name and room number, the time and date they were returned to storage, the number and activity of sources in storage after the return, and the initials of the individual who returned the sources to storage.

(c) Immediately after implanting sources in a patient the licensee shall make a radiation survey of the patient and the area of use to confirm that no sources have been misplaced. The licensee shall make a record of each survey.

(d) A licensee shall retain the records required in paragraphs (b) and (c) of this section for three years.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.410 Safety instruction.

(a) The licensee shall provide radiation safety instruction to all personnel caring for the patient undergoing implant therapy. To satisfy this requirement, the instruction must describe:

(1) Size and appearance of the brachytherapy sources;

(2) Safe handling and shielding instructions in case of a dislodged source;

(3) Procedures for patient control;

(4) Procedures for visitor control; and

(5) Procedures for notification of the Radiation Safety Officer if the patient dies or has a medical emergency.

(b) A licensee shall retain for three years a record of individuals receiving instruction required by paragraph (a) of this section, a description of the instruction, the date of instruction, and the name of the individual who gave the instruction.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.415 Safety precautions.

(a) For each patient receiving implant therapy, a licensee shall:

(1) Not quarter the patient in the same room with a patient who is not receiving radiation therapy unless the licensee can demonstrate compliance with the requirements of § 20.105(b) of this chapter at a distance of one meter from the implant;

(2) Post the patient's door with a "Radioactive Materials" sign and note on the door or in the patient's chart where and how long visitors may stay in the patient's room;

(3) Authorize visits by individuals under age 18 only on a patient-by-patient basis with the approval of the authorized user after consultation with the Radiation Safety Officer; and

(4) Promptly after implanting the material, survey the dose rates in contiguous restricted and unrestricted areas with a radiation measurement survey instrument to demonstrate compliance with the requirements of Part 20 of this chapter, and retain for three years a record of each survey that includes the time and date of the survey, a plan of the area or list of points surveyed, the measured dose rate at several points expressed in millirem per hour, the instrument used to make the survey, and the initials of the individual who made the survey.

(5) Provide the patient with radiation safety guidance that will help to keep radiation dose to household members and the public as low as reasonably achievable before releasing the patient if the patient was administered a permanent implant.

(b) A licensee shall notify the Radiation Safety Officer immediately if the patient dies or has a medical emergency.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.420 Possession of survey instrument.

A licensee authorized to use byproduct material for implant therapy shall have in its possession a portable radiation detection survey instrument capable of detecting dose rates over the range 0.1 millirem per hour to 100 millirem per hour, and a portable radiation measurement survey instrument capable of measuring dose rates over the range 1 millirem per hour to 1000 millirem per hour.

Subpart H—Sealed Sources for Diagnosis

§ 35.500 Use of sealed sources for diagnosis.

A licensee shall use the following sealed sources in accordance with the manufacturer's radiation safety and handling instructions:

(a) Iodine-125, americium-241, or gadolinium-153 as a sealed source in a device for bone mineral analysis; and

(b) Iodine-125 as a sealed source in a portable imaging device.

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§ 35.520 Availability of survey instrument.

A licensee authorized to use byproduct material as a sealed source for diagnostic purposes shall have available for use a portable radiation detection survey instrument capable of detecting dose rates over the range 0.1 millirem per hour to 100 millirem per hour or a portable radiation measurement survey instrument capable of measuring dose rates over the range 1 millirem per hour to 1000 millirem per hour. The instrument must have been calibrated in accordance with § 35.51 of this part.

Subpart I—Teletherapy

§ 35.600 Use of a sealed source in a teletherapy unit.

The regulations and provisions of this subpart govern the use of teletherapy units for medical use that contain a sealed source of cobalt-60 or cesium-137.

§ 35.605 Maintenance and repair restrictions.

Only a person specifically licensed by the Commission or an Agreement State to perform teletherapy unit maintenance and repair shall:

(a) Install, relocate, or remove a teletherapy sealed source or a teletherapy unit that contains a sealed source; or

(b) Maintain, adjust, or repair the source drawer, the shutter or other mechanism of a teletherapy unit that could expose the source, reduce the shielding around the source, or result in increased radiation levels.

§ 35.606 License amendments.

In addition to the changes specified in § 35.13 of this part, a licensee shall apply for and must receive a license amendment before:

(a) Making any change in the treatment room shielding;

(b) Making any change in the location of the teletherapy unit within the treatment room;

(c) Using the teletherapy unit in a manner that could result in increased radiation levels in areas outside the teletherapy treatment room;

(d) Relocating the teletherapy unit; or

(e) Allowing an individual not listed on the licensee's license to perform the duties of the teletherapy physicist.

§ 35.610 Safety instruction.

(a) A licensee shall post instructions at the teletherapy unit console. To satisfy this requirement, these instructions must inform the operator of:

(1) The procedure to be followed to ensure that only the patient is in the treatment room before turning the primary beam of radiation on to begin a treatment or after a door interlock interruption;

(2) The procedure to be followed if:

(i) The operator is unable to turn the primary beam of radiation off with controls outside the treatment room or any other abnormal operation occurs; and

(ii) The names and telephone numbers of the authorized users and Radiation Safety Officer to be immediately contacted if the teletherapy unit or console operates abnormally.

(b) A licensee shall provide instruction in the topics identified in paragraph (a) of this section to all individuals who operate a teletherapy unit.

(c) A licensee shall retain for three years a record of individuals receiving instruction required by paragraph (b) of this section, a description of the instruction, the date of instruction, and the name of the individual who gave the instruction.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.615 Safety precautions.

(a) A licensee shall control access to the teletherapy room by a door at each entrance.

(b) A licensee shall equip each entrance to the teletherapy room with an electrical interlock system that will:

(1) Prevent the operator from turning the primary beam of radiation on unless each treatment room entrance door is closed;

(2) Turn the primary beam of radiation off immediately when an entrance door is opened; and

(3) Prevent the primary beam of radiation from being turned on following an interlock interruption until all

treatment room entrance doors are closed and the beam on-off control is reset at the console.

(c) A licensee shall equip each entrance to the teletherapy room with a beam condition indicator light.

(d) A licensee shall install in each teletherapy room a permanent radiation monitor capable of continuously monitoring beam status.

(1) A radiation monitor must provide visible notice of a teletherapy unit malfunction that results in an exposed or partially exposed source, and must be observable by an individual entering the teletherapy room.

(2) A radiation monitor must be equipped with a backup power supply separate from the power supply to the teletherapy unit. This backup power supply may be a battery system.

(3) A radiation monitor must be checked with a dedicated check source for proper operation each day before the teletherapy unit is used for treatment of patients.

(4) A licensee shall maintain a record of the check required by paragraph (d)(3) of this section for three years. The record must include the date of the check, notation that the monitor indicates when its detector is and is not exposed, and the initials of the individual who performed the check.

(5) If a radiation monitor is inoperable, the licensee shall require any individual entering the teletherapy room to use a survey instrument or audible alarm personal dosimeter to monitor for any malfunction of the source exposure mechanism that may result in an exposed or partially exposed source. The instrument or dosimeter must be checked with a dedicated check source for proper operation at the beginning of each day of use. The licensee shall keep a record as described in paragraph (d)(4) of this section.

(6) A licensee shall promptly repair or replace the radiation monitor if it is inoperable.

(e) A licensee shall construct or equip each teletherapy room to permit continuous observation of the patient from the teletherapy unit console during irradiation.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.620 Possession of survey instrument.

A licensee authorized to use byproduct material in a teletherapy unit shall have in its possession either a portable radiation detection survey instrument capable of detecting dose rate over the range 0.1 millirem per hour to 100 millirem per hour or a portable radiation measurement survey instrument capable of measuring dose rates over the range 1 millirem per hour to 1,000 millirem per hour.

§ 35.630 Dosimetry equipment.

(a) A licensee shall have a calibrated dosimetry system available for use. To satisfy this requirement, one of the following two conditions must be met.

(1) The system must have been calibrated by the National Bureau of Standards or by a calibration laboratory accredited by the American Association of Physicists in Medicine (AAPM). The calibration must have been performed within the previous two years and after any servicing that may have affected system calibration; or

(2) The system must have been calibrated within the previous four years; eighteen to thirty months after that calibration, the system must have been intercompared at an intercomparison meeting with another dosimetry system that was calibrated within the past twenty-four months by the National Bureau of Standards or by a calibration laboratory accredited by the AAPM. The intercomparison meeting must be sanctioned by a calibration laboratory or radiologic physics center accredited by the AAPM. The results of the intercomparison meeting must have indicated that the calibration factor of the licensee's system had not changed by more than 2 percent. The licensee may not use the intercomparison result to change the calibration factor. When intercomparing dosimetry systems to be used for calibrating cobalt-60 teletherapy units, the licensee shall use a teletherapy unit with a cobalt-60 source. When intercomparing dosimetry systems to be used for calibrating cesium-

137 teletherapy units, the licensee shall use a teletherapy unit with a cesium-137 source.

(b) The licensee shall have available for use a dosimetry system for spot-check measurements. To satisfy this requirement, the system may be compared with a system that has been calibrated in accordance with paragraph (a) of this section. This comparison must have been performed within the previous year and after each servicing that may have affected system calibration. The spot-check system may be the same system used to meet the requirement in paragraph (a) of this section.

(c) The licensee shall retain a record of each calibration, intercomparison, and comparison for the duration of the license. For each calibration, intercomparison, or comparison, the record must include the date, the model numbers and serial numbers of the instruments that were calibrated, intercompared, or compared as required by paragraphs (a) and (b) of this section, the correction factor that was determined from the calibration or comparison or the apparent correction factor that was determined from an intercomparison, the names of the individuals who performed the calibration, intercomparison, or comparison, and evidence that the intercomparison meeting was sanctioned by a calibration laboratory or radiologic physics center accredited by AAPM.

§ 35.632 Full calibration measurements.

(a) A licensee authorized to use a teletherapy unit for medical use shall perform full calibration measurements on each teletherapy unit:

(1) Before the first medical use of the unit; and

(2) Before medical use under the following conditions:

(i) Whenever spot-check measurements indicate that the output differs by more than 5 percent from the output obtained at the last full calibration corrected mathematically for radioactive decay;

(ii) Following replacement of the source or following reinstallation of the teletherapy unit in a new location;

(iii) Following any repair of the teletherapy unit that includes removal of the source or major repair of the components associated with the source exposure assembly; and

(3) At intervals not exceeding one year.

(b) To satisfy the requirement of paragraph (a) of this section, full calibration measurements must include determination of:

(1) The output within ±3 percent for the range of field sizes and for the distance or range of distances used for medical use;

(2) The coincidence of the radiation field and the field indicated by the light beam localizing device;

(3) The uniformity of the radiation field and its dependence on the orientation of the useful beam;

(4) Timer constancy and linearity over the range of use;

(5) On-off error; and

(6) The accuracy of all distance measuring and localization devices in medical use.

(c) A licensee shall use the dosimetry system described in § 35.630(a) to measure the output for one set of exposure conditions. The remaining radiation measurements required in paragraph (b)(1) of this section may be made using a dosimetry system that indicates relative dose rates.

(d) A licensee shall make full calibration measurements required by paragraph (a) of this section in accordance with either the procedures recommended by the Scientific Committee on Radiation Dosimetry of the American Association of Physicists in Medicine that are described in *Physics in Medicine and Biology* Vol. 16, No. 3, 1971, pp. 379-396, or by Task Group 21 of the Radiation Therapy Committee of the American Association of Physicists in Medicine that are described in *Medical Physics* Vol. 10, No. 6, 1983, pp. 741-771, and Vol. 11, No. 2, 1984, p. 213. (Both of these references have been approved for incorporation by reference by the Director of the Federal Register. Copies of the documents are available for inspection or may be obtained from the U.S. Nuclear Regulatory Commission, Public Document Room, 2120 L Street, NW., Washington, DC 20555. Copies of the documents are also on file at the Office of the Federal Register, 1100 L Street

NW., Room 8301, Washington, DC 20408. A notice of any change in the material will be published in the FEDERAL REGISTER.)

(e) A licensee shall correct mathematically the outputs determined in paragraph (b)(1) of this section for physical decay for intervals not exceeding one month for cobalt-60 or six months for cesium-137.

(f) Full calibration measurements required by paragraph (a) of this section and physical decay corrections required by paragraph (e) of this section must be performed by the licensee's teletherapy physicist.

(g) A licensee shall retain a record of each calibration for the duration of use of the teletherapy unit source. The record must include the date of the calibration, the manufacturer's name, model number, and serial number for both the teletherapy unit and the source, the model numbers and serial numbers of the instruments used to calibrate the teletherapy unit, tables that describe the output of the unit over the range of field sizes and for the range of distances used in radiation therapy, a determination of the coincidence of the radiation field and the field indicated by the light beam localizing device, an assessment of timer linearity and constancy, the calculated on-off error, the estimated accuracy of each distance measuring or localization device, and the signature of the teletherapy physicist.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 43420, Oct. 27, 1988]

§ 35.634 Periodic spot-checks.

(a) A licensee authorized to use teletherapy units for medical use shall perform output spot-checks on each teletherapy unit once in each calendar month that include determination of:

(1) Timer constancy, and timer linearity over the range of use;

(2) On-off error;

(3) The coincidence of the radiation field and the field indicated by the light beam localizing device;

(4) The accuracy of all distance measuring and localization devices used for medical use;

(5) The output for one typical set of operating conditions measured with the dosimetry system described in § 35.630(b) of this part; and

(6) The difference between the measurement made in paragraph (b)(5) of this section and the anticipated output, expressed as a percentage of the anticipated output (i.e., the value obtained at last full calibration corrected mathematically for physical decay).

(b) A licensee shall perform measurements required by paragraph (a) of this section in accordance with procedures established by the teletherapy physicist. That individual need not actually perform the spotcheck measurements.

(c) A licensee shall have the teletherapy physicist review the results of each spot-check within 15 days. The teletherapy physicist shall promptly notify the licensee in writing of the results of each spot-check. The licensee shall keep a copy of each written notification for three years.

(d) A licensee authorized to use a teletherapy unit for medical use shall perform safety spot-checks of each teletherapy facility once in each calendar month that assure proper operation of:

(1) Electrical interlocks at each teletherapy room entrance;

(2) Electrical or mechanical stops installed for the purpose of limiting use of the primary beam of radiation (restriction of source housing angulation or elevation, carriage or stand travel and operation of the beam on-off mechanism);

(3) Beam condition indicator lights on the teletherapy unit, on the control console, and in the facility;

(4) Viewing systems;

(5) Treatment room doors from inside and outside the treatment room; and

(6) Electrically assisted treatment room doors with the teletherapy unit electrical power turned off.

(e) A licensee shall arrange for prompt repair of any system identified in paragraph (d) of this section that is not operating properly, and shall not use the teletherapy unit following door interlock malfunction until the interlock system has been repaired.

(f) A licensee shall retain a record of each spot-check required by paragraphs (a) and (d) of this section for three years. The record must include the date of the spot-check, the manufacturer's name, model number, and serial number for both the teletherapy unit and source, the manufacturer's name, model number and serial number of the instrument used to measure the output of the teletherapy unit, an assessment of timer linearity and constancy, the calculated on-off error, a determination of the coincidence of the radiation field and the field indicated by the light beam localizing device, the calculated on-off error, the determined accuracy of each distance measuring or localization device, the difference between the anticipated output and the measured output, notations indicating the operability of each entrance door electrical interlock, each electrical or mechanical stop, each beam condition indicator light, the viewing system and doors, and the signature of the individual who performed the periodic spot-check.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.636 Safety checks for teletherapy facilities.

(a) A licensee shall promptly check all systems listed in § 35.634(d) for proper function after each installation of a teletherapy source and after making any change for which an amendment is required by § 35.606 (a) through (d).

(b) If the results of the checks required in paragraph (a) of this section indicate the malfunction of any system specified in § 35.634(d), the licensee shall lock the control console in the off position and not use the unit except as may be necessary to repair, replace, or check the malfunctioning system.

(c) A licensee shall retain for three years a record of the facility checks following installation of a source. The record must include notations indicating the operability of each entrance door interlock, each electrical or mechanical stop, each beam condition indicator light, the viewing system, and doors, and the signature of the Radiation Safety Officer.

[51 FR 36951, Oct. 16, 1986, as amended at 53 FR 19247, May 27, 1988]

§ 35.641 Radiation surveys for teletherapy facilities.

(a) Before medical use, after each installation of a teletherapy source, and after making any change for which an amendment is required by § 35.606 (a) through (d), the licensee shall perform radiation surveys with a portable radiation measurement survey instrument calibrated in accordance with § 35.51 of this part to verify that:

(1) The maximum and average dose rates at one meter from the teletherapy source with the source in the off position and the collimators set for a normal treatment field do not exceed 10 millirem per hour and 2 millirem per hour, respectively; and

(2) With the teletherapy source in the on position with the largest clinically available treatment field and with a scattering phantom in the primary beam of radiation, that:

(i) Radiation dose quantities per unit time in restricted areas are not likely to cause personnel exposures in excess of the limits specified in § 20.101 of this chapter; and

(ii) Radiation dose quantities per unit time in unrestricted areas do not exceed the limits specified in § 20.105(b) of this chapter.

(b) If the results of the surveys required in paragraph (a) of this section indicate any radiation dose quantity per unit time in excess of the respective limit specified in that paragraph, the licensee shall lock the control in the off position and not use the unit:

(1) Except as may be necessary to repair, replace, or test the teletherapy unit shielding or the treatment room shielding; or

(2) Until the licensee has received a specific exemption pursuant to § 20.501 of this chapter.

(c) A licensee shall retain a record of the radiation measurements made following installation of a source for the duration of the license. The record must include the date of the measurements, the reason the survey is required, the manufacturer's name, model number and serial number of the teletherapy unit, the source, and the instrument used to measure radiation levels, each dose rate measured around the teletherapy source while in the off position and the average of all measurements, a plan of the areas surrounding the treatment room that were surveyed, the measured dose rate at several points in each area expressed in millirem per hour, the calculated maximum quantity of radiation over a period of one week for each restricted and unrestricted area, and the signature of the Radiation Safety Officer.

§ 35.643 Modification of teletherapy unit or room before beginning a treatment program.

(a) If the survey required by § 35.641 indicates that an individual in an unrestricted area may be exposed to levels of radiation greater than those permitted by § 20.105(b) of this chapter, before beginning the treatment program the licensee shall:

(1) Either equip the unit with stops or add additional radiation shielding to ensure compliance with § 20.105(b);

(2) Perform the survey required by § 35.641 again; and

(3) Include in the report required by § 35.645 the results of the initial survey, a description of the modification made to comply with paragraph (a)(1) of this section, and the results of the second survey.

(b) As an alternative to the requirements set out in paragraph (a) of this section, a licensee may request a license amendment under § 20.105(a) of this chapter that authorizes radiation levels in unrestricted areas greater than those permitted by § 20.105(b). A licensee may not begin the treatment program until the license amendment has been issued.

§ 35.645 Reports of teletherapy surveys, checks, tests, and measurements.

A licensee shall mail a copy of the records required in §§ 35.636, 35.641, 35.643, and the output from the teletherapy source expressed as roentgens or rads per hour at one meter from the source and determined during the full calibration required in § 35.632, to the appropriate Commission Regional Office listed in § 30.6 of this chapter within thirty days following completion of the action that initiated the record requirement.

§ 35.647 Five-year inspection.

(a) A licensee shall have each teletherapy unit fully inspected and serviced during teletherapy source replacement or at intervals not to exceed five years, whichever comes first, to assure proper functioning of the source exposure mechanism.

(b) This inspection and servicing may only be performed by persons specifically licensed to do so by the Commission or an Agreement State.

(c) A licensee shall keep a record of the inspection and servicing for the duration of the license. The record must contain the inspector's name, the inspector's license number, the date of inspection, the manufacturer's name and model number and serial number for both the teletherapy unit and source, a list of components inspected, a list of components serviced and the type of service, a list of components replaced, and the signature of the inspector.

Subpart J—Training and Experience Requirements

§ 35.900 Radiation Safety Officer.

Except as provided in § 35.901, the licensee shall require an individual fulfilling the responsibilities of the Radiation Safety Officer as provided in § 35.32 to be an individual who:

(a) Is certified by:

(1) American Board of Health Physics in Comprehensive Health Physics;

(2) American Board of Radiology;

(3) American Board of Nuclear Medicine;

(4) American Board of Science in Nuclear Medicine; or

(5) Board of Pharmaceutical Specialties in Nuclear Pharmacy; or

(b) Has had classroom and laboratory training and experience as follows:

(1) 200 hours of classroom and laboratory training that includes:

(i) Radiation physics and instrumentation;

(ii) Radiation protection;

(iii) Mathematics pertaining to the use and measurement of radioactivity;

(iv) Radiation biology; and

(v) Radiopharmaceutical chemistry; and

(2) One year of full time experience as a radiation safety technologist at a medical institution under the supervision of the individual identified as the Radiation Safety Officer on a Commission or Agreement State license that authorizes the medical use of byproduct material; or

(c) Be an authorized user identified on the licensee's license.

§ 35.901 Training for experienced Radiation Safety Officer.

An individual identified as a Radiation Safety Officer on a Commission or Agreement State license before October 1, 1986 need not comply with the training requirements of § 35.900.

§ 35.910 Training for uptake, dilution, and excretion studies.

Except as provided in §§ 35.970 and 35.971, the licensee shall require the authorized user of a radiopharmaceutical in § 35.100(a) to be a physician who:

(a) Is certified in:

(1) Nuclear medicine by the American Board of Nuclear Medicine;

(2) Diagnostic radiology by the American Board of Radiology; or

(3) Diagnostic radiology or radiology by the American Osteopathic Board of Radiology; or

(b) Has had classroom and laboratory training in basic radioisotope handling techniques applicable to the use of prepared radiopharmaceuticals, and supervised clinical experience as follows:

(1) 40 hours of classroom and laboratory training that includes:

(i) Radiation physics and instrumentation,

(ii) Radiation protection;

(iii) Mathematics pertaining to the use and measurement of radioactivity;

(iv) Radiation biology; and

(v) Radiopharmaceutical chemistry; and

(2) 20 hours of supervised clinical experience under the supervision of an authorized user and that includes:

(i) Examining patients and reviewing their case histories to determine their suitability for radioisotope diagnosis, limitations, or contraindications;

(ii) Selecting the suitable radiopharmaceuticals and calculating and measuring the dosages;

(iii) Administering dosages to patients and using syringe radiation shields;

(iv) Collaborating with the authorized user in the interpretation of radioisotope test results; and

(v) Patient followup; or

(c) Has successfully completed a six-month training program in nuclear medicine as part of a training program that has been approved by the Accreditation Council for Graduate Medical Education and that included classroom and laboratory training, work experience, and supervised clinical experience in all the topics identified in paragraph (b) of this section.

§ 35.920 Traininq for imaging and localization studies.

Except as provided in § 35.970 or 35.971, the licensee shall require the authorized user of a radiopharmaceutical, generator, or reagent kit in § 35.200(a) to be a physician who:

(a) Is certified in:

(1) Nuclear medicine by the American Board of Nuclear Medicine;

(2) Diagnostic radiology by the American Board of Radiology; or

(3) Diagnostic radiology or radiology by the American Osteopathic Board of Radiology; or

(b) Has had classroom and laboratory training in basic radioisotope handling techniques applicable to the use of prepared radiopharmaceuticals, generators, and reagent kits, supervised work experience, and supervised clinical experience as follows:

(1) 200 hours of classroom and laboratory training that includes:

(i) Radiation physics and instrumentation;

(ii) Radiation protection;

(iii) Mathematics pertaining to the use and measurement of radioactivity;

(iv) Radiopharmaceutical chemistry; and

(v) Radiation biology; and

(2) 500 hours of supervised work experience under the supervision of an authorized user that includes:

(i) Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys;

(ii) Calibrating dose calibrators and diagnostic instruments and performing checks for proper operation of survey meters;

(iii) Calculating and safely preparing patient dosages;

(iv) Using administrative controls to prevent the misadministration of byproduct material;

(v) Using procedures to contain spilled byproduct material safely and using proper decontamination procedures; and

(vi) Eluting technetium-99m from generator systems, measuring and testing the eluate for molybdenum-99 and alumina contamination, and processing the eluate with reagent kits to prepare technetium-99m labeled radiopharmaceuticals; and

(3) 500 hours of supervised clinical experience under the supervision of an authorized user that includes:

(i) Examining patients and reviewing their case histories to determine their suitability for radioisotope diagnosis, limitations, or contraindications;

(ii) Selecting the suitable radiopharmaceuticals and calculating and measuring the dosages;

(iii) Administering dosages to patients and using syringe radiation shields;

(iv) Collaborating with the authorized user in the interpretation of radioisotope test results; and

(v) Patient followup; or

(c) Has successfully completed a six-month training program in nuclear medicine that has been approved by the Accreditation Council for Graduate Medical Education and that included classroom and laboratory training, work experience, and supervised clinical experience in all the topics identified in paragraph (b) of this section.

§ 35.930 Training for therapeutic use of radiopharmaceuticals.

Except as provided in § 35.970, the licensee shall require the authorized user of radiopharmaceuticals in § 35.300 to be a physician who:

(a) Is certified by:

(1) The American Board of Nuclear Medicine; or

(2) The American Board of Radiology in radiology or therapeutic radiology; or

(b) Has had classroom and laboratory training in basic radioisotope handling techniques applicable to the use of therapeutic radiopharmaceuticals, and supervised clinical experience as follows:

(1) 80 hours of classroom and laboratory training that includes:

(i) Radiation physics and instrumentation;

(ii) Radiation protection;

(iii) Mathematics pertaining to the use and measurement of radioactivity; and

(iv) Radiation biology; and

(2) Supervised clinical experience under the supervision of an authorized user at a medical institution that includes:

(i) Use of iodine-131 for diagnosis of thyroid function and the treatment of hyperthyroidism or cardiac dysfunction in 10 individuals; and

(ii) Use of iodine-131 for treatment of thyroid carcinoma in 3 individuals.

§ 35.932 Training for treatment of hyperthyroidism.

Except as provided in § 35.970, the licensee shall require the authorized user of only iodine-131 for the treatment of hyperthyroidism to be a physician with special experience in thyroid disease who has had classroom and laboratory training in basic radioisotope handling techniques applicable to the use of iodine-131 for treating hyperthyroidism, and supervised clinical experience as follows:

(a) 80 hours of classroom and laboratory training that includes:

(1) Radiation physics and instrumentation;

(2) Radiation protection,

(3) Mathematics pertaining to the use and measurement of radioactivity; and

(4) Radiation biology; and

(b) Supervised clinical experience under the supervision of an authorized user that includes the use of iodine-131 for diagnosis of thyroid function, and the treatment of hyperthyroidism in 10 individuals.

35.934 Training for treatment of thyroid carcinoma.

Except as provided in § 35.970, the li-
ensee shall require the authorized
ser of only iodine-131 for the treat-
ent of thyroid carcinoma to be a
hysician with special experience in
yroid disease who has had classroom
nd laboratory training in basic radioi-
otope handling techniques applicable
the use of iodine-131 for treating
hyroid carcinoma, and supervised
linical experience as follows:

(a) 80 hours of classroom and labora-
ory training that includes:

(1) Radiation physics and instrumen-
ation;

(2) Radiation protection;

(3) Mathematics pertaining to the
se and measurement of radioactivity;
nd

(4) Radiation biology; and

(b) Supervised clinical experience
nder the supervision of an authorized
user that includes the use of iodine-131 for the treatment of thyroid carcinoma in 3 individuals.

§ 35.940 Training for use of brachytherapy sources.

Except as provided in § 35.970, the licensee shall require the authorized user of a brachytherapy source listed in § 35.400 for therapy to be a physician who:

(a) Is certified in:

(1) Radiology or therapeutic radiology by the American Board of Radiology;

(2) Radiation oncology by the American Osteopathic Board of Radiology;

(3) Radiology, with specialization in radiotherapy, as a British "Fellow of the Faculty of Radiology" or "Fellow of the Royal College of Radiology"; or

(4) Therapeutic radiology by the Canadian Royal College of Physicians and Surgeons; or

(b) Is in the active practice of therapeutic radiology, has had classroom and laboratory training in radioisotope handling techniques applicable to the therapeutic use of brachytherapy sources, supervised work experience, and supervised clinical experience as follows:

(1) 200 hours of classroom and laboratory training that includes:

(i) Radiation physics and instrumentation;

(ii) Radiation protection;

(iii) Mathematics pertaining to the use and measurement of radioactivity; and

(iv) Radiation biology;

(2) 500 hours of supervised work experience under the supervision of an authorized user at a medical institution that includes:

(i) Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys;

(ii) Checking survey meters for proper operation;

(iii) Preparing, implanting, and removing sealed sources;

(iv) Maintaining running inventories of material on hand;

(v) Using administrative controls to prevent the misadministration of byproduct material; and

(vi) Using emergency procedures to control byproduct material; and

(3) Three years of supervised clinical experience that includes one year in a formal training program approved by the Residency Review Committee for Radiology of the Accreditation Council for Graduate Medical Education or the Committee on Postdoctoral Training of the American Osteopathic Association, and an additional two years of clinical experience in therapeutic radiology under the supervision of an authorized user at a medical institution that includes:

(i) Examining individuals and reviewing their case histories to determine their suitability for brachytherapy treatment, and any limitations or contraindications;

(ii) Selecting the proper brachytherapy sources and dose and method of administration;

(iii) Calculating the dose; and

(iv) Post-administration followup and review of case histories in collaboration with the authorized user.

§ 35.941 Training for ophthalmic use of strontium-90.

Except as provided in § 35.970, the licensee shall require the authorized user of only strontium-90 for ophthalmic radiotherapy to be a physician who is in the active practice of therapeutic radiology or ophthalmology, and has had classroom and laboratory training in basic radioisotope handling techniques applicable to the use of strontium-90 for ophthalmic radiotherapy, and a period of supervised clinical training in ophthalmic radiotherapy as follows:

(a) 24 hours of classroom and laboratory training that includes:

(1) Radiation physics and instrumentation;

(2) Radiation protection;

(3) Mathematics pertaining to the use and measurement of radioactivity; and

(4) Radiation biology;

(b) Supervised clinical training in ophthalmic radiotherapy under the supervision of an authorized user at a medical institution that includes the use of strontium-90 for the ophthalmic treatment of five individuals that includes:

(1) Examination of each individual to be treated;

(2) Calculation of the dose to be administered;

(3) Administration of the dose; and

(4) Followup and review of each individual's case history.

§ 35.950 Training for use of sealed sources for diagnosis.

Except as provided in § 35.970, the licensee shall require the authorized user of a sealed source in a device listed in § 35.500 to be a physician, dentist, or podiatrist who:

(a) Is certified in:

(1) Radiology, diagnostic radiology, or therapeutic radiology by the American Board of Radiology;

(2) Nuclear medicine by the American Board of Nuclear Medicine; or

(3) Diagnostic radiology or radiology by the American Osteopathic Board of Radiology; or

(b) Has had 8 hours of classroom and laboratory training in basic radioisotope handling techniques specifically applicable to the use of the device that includes:

(1) Radiation physics, mathematics pertaining to the use and measurement of radioactivity, and instrumentation;

(2) Radiation biology;

(3) Radiation protection; and

(4) Training in the use of the device for the uses requested.

§ 35.960 Training for teletherapy.

Except as provided in § 35.970, the licensee shall require the authorized user of a sealed source listed in § 35.600 in a teletherapy unit to be a physician who:

(a) Is certified in:

(1) Radiology or therapeutic radiology by the American Board of Radiology;

(2) Radiation oncology by the American Osteopathic Board of Radiology;

(3) Radiology, with specialization in radiotherapy, as a British "Fellow of the Faculty of Radiology" or "Fellow of the Royal College of Radiology"; or

(4) Therapeutic radiology by the Canadian Royal College of Physicians and Surgeons; or

(b) Is in the active practice of therapeutic radiology, and has had classroom and laboratory training in basic radioisotope techniques applicable to the use of a sealed source in a teletherapy unit, supervised work experience, and supervised clinical experience as follows:

(1) 200 hours of classroom and laboratory training that includes:

(i) Radiation physics and instrumentation;

(ii) Radiation protection;

(iii) Mathematics pertaining to the use and measurement of radioactivity; and

(iv) Radiation biology;

(2) 500 hours of supervised work experience under the supervision of an authorized user at a medical institution that includes:

(i) Review of the full calibration measurements and periodic spot checks;

(ii) Preparing treatment plans and calculating treatment times;

(iii) Using administrative controls to prevent misadministrations;

(iv) Implementing emergency procedures to be followed in the event of the abnormal operation of a teletherapy unit or console; and

(v) Checking and using survey meters; and

(3) Three years of supervised clinical xperience that includes one year in a ormal training program approved by he Residency Review Committee for adiology of the Accreditation Counil for Graduate Medical Education or he Committee on Postdoctoral Trainng of the American Osteopathic Assoiation and an additional two years of linical experience in therapeutic radiology under the supervision of an auhorized user at a medical institution hat includes:

(i) Examining individuals and reiewing their case histories to determine their suitability for teletherapy treatment, and any limitations or contraindications;

(ii) Selecting the proper dose and how it is to be administered;

(iii) Calculating the teletherapy doses and collaborating with the authorized user in the review of patients' progress and consideration of the need to modify originally prescribed doses as warranted by patients' reaction to radiation; and

(iv) Post-administration followup and review of case histories.

§ 35.961 Training for teletherapy physicist.

The licensee shall require the teletherapy physicist to be an individual who:

(a) Is certified by the American Board of Radiology in:

(1) Therapeutic radiological physics;

(2) Roentgen ray and gamma ray physics;

(3) X-ray and radium physics; or

(4) Radiological physics; or

(b) Holds a master's or doctor's degree in physics, biophysics, radiological physics, or health physics, and has completed one year of full time training in therapeutic radiological physics and an additional year of full time work experience under the supervision of a teletherapy physicist at a medical institution that includes the tasks listed in §§ 35.59, 35.632, 35.634, and 35.641 of this part.

§ 35.970 Training for experienced authorized users.

Physicians, dentists, or podiatrists identified as authorized users for the medical, dental, or podiatric use of byproduct material on a Commission or Agreement State license issued before April 1, 1987 who perform only those methods of use for which they were authorized on that date need not comply with the training requirements of Subpart J.

§ 35.971 Physician training in a three month program.

A physician who, before July 1, 1984, began a three month nuclear medicine training program approved by the Accreditation Council for Graduate Medical Education and has successfully completed the program need not comply with the requirements of §§ 35.910 or 35.920.

§ 35.972 Recentness of training.

The training and experience specified in this subpart must have been obtained within the five years preceding the date of application or the individual must have had related continuing education and experience since the required training and experience was completed.

Subpart K—Enforcement

§ 35.990 Violations.

(a) An injunction or other court order may be obtained to prohibit a violation of any provision of:

(1) The Atomic Energy Act of 1954, as amended;

(2) Title II of the Energy Reorganization Act of 1974, as amended; or

(3) Any rule, regulation, or order issued under these Acts.

(b) A court order may be obtained for the payment of a civil penalty imposed for violation of:

(1) Sections 53, 57, 62, 63, 81, 82, 101, 103, 104, 107, or 109 under section 234 of the Atomic Energy Act of 1954, as amended;

(2) Section 206 of the Energy Reorganization Act of 1974;

(3) Any rule, regulation, or order issued under these Acts;

(4) Any term, condition, or limitation of any license issued under these Acts; or

(5) Any requirement for which a license may be revoked under section 186 of the Atomic Energy Act of 1954, as amended.

(c) Any person who willfully violates any provision of the Atomic Energy Act of 1954, as amended, or any rule, regulation, or order issued under the Act may be guilty of a crime and, upon conviction, may be punished by fine or imprisonment or both as provided by law. Regulations issued under the Act include regulations issued under sec. 161, and cited in the authority citation at the beginning of this part for the purposes of sec. 223.

§ 35.999 Resolution of conflicting requirements during transition period.

If the rules in this part conflict with the licensee's radiation safety program as identified in its license, and if that license was approved by the Commission before April 1, 1987 and has not been renewed since April 1, 1987, then the requirements in the license will apply. However, if that licensee exercises its privilege to make minor changes in its radiation safety procedures that are not potentially important to safety under § 35.31 of this chapter, the portion changed must comply with the requirements of this Part. At the time of license renewal and thereafter, these admendments to this Part shall apply.

PART 39—LICENSES AND RADIATION SAFETY REQUIREMENTS FOR WELL LOGGING

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AUTHORITY: Secs. 53, 57, 62, 63, 65, 69, 81, 82, 161, 182, 183, 186, 68 Stat. 929, 930, 932, 933, 934, 935, 948, 953, 954, 955, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2073, 2077, 2092, 2093, 2095, 2099, 2111, 2112, 2201, 2232, 2233, 2236, 2282); secs. 201, as amended, 202,. 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273); §§ 39.15, 39.17, 39.31-39.51, 39.61-39.77 are issued under sec. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201(b); and §§ 39.15, 39.33-39.43, 39.61-39.67, 39.73-39.77 are issued under sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

SOURCE: 52 FR 8234, Mar. 17, 1987, unless otherwise noted.

Subpart A—General Provisions

§ 39.1 Purpose and scope.

(a) This part prescribes requirements for the issuance of a license authorizing the use of licensed materials including sealed sources, radioactive

acers, radioactive markers, and ura-
ium sinker bars in well logging in a
ngle well. This part also prescribes
adiation safety requirements for per-
ons using licensed materials in these
perations. The provisions and re-
uirements of this part are in addition
o, and not in substitution for, other
equirements of this chapter. In par-
icular, the provisions of Parts 19, 20,
1, 30, 40, 70, 71, and 150 of this chap-
er apply to applicants and licensees
ubject to this part.

(b) The requirements set out in this
oart do not apply to the issuance of a
icense authorizing the use of licensed
material in tracer studies involving
multiple wells, such as field flooding
studies, or to the use of sealed sources
auxiliary to well logging but not low-
ered into wells.

§39.2 Definitions.

"Field station" means a facility where licensed material may be stored or used and from which equipment is dispatched to temporary jobsites.

"Fresh water aquifer," for the purpose of this part, means a geologic formation that is capable of yielding fresh water to a well or spring.

"Injection tool" means a device used for controlled subsurface injection of radioactive tracer material.

"Irretrievable well logging source" means any sealed source containing licensed material that is pulled off or not connected to the wireline that suspends the source in the well and for which all reasonable effort at recovery has been expended.

"Licensed material" means byproduct, source, or special nuclear material received, processed, used, or transferred under a license issued by the Commission under the regulations in this chapter.

"Logging assistant" means any individual who, under the personal supervision of a logging supervisor, handles sealed sources or tracers that are not in logging tools or shipping containers or who performs surveys required by § 39.67.

"Logging supervisor" means an individual who uses licensed material or provides personal supervision in the use of licensed material at a temporary jobsite and who is responsible to the licensee for assuring compliance with the requirements of the Commission's regulations and the conditions of the license.

"Logging tool" means a device used subsurface to perform well logging.

"Personal supervision" means guidance and instruction by a logging supervisor, who is physically present at a temporary jobsite, who is in personal contact with logging assistants, and who can give immediate assistance.

"Radioactive marker" means licensed material used for depth determination or direction orientation. For purposes of this part, this term includes radioactive collar markers and radioactive iron nails.

"Safety review" means a periodic review provided by the licensee for its employees on radiation safety aspects of well logging. The review may include, as appropriate, the results of internal inspections, new procedures or equipment, accidents or errors that have been observed, and opportunities for employees to ask safety questions.

"Sealed source" means any licensed material that is encased in a capsule designed to prevent leakage or escape of the licensed material.

"Source holder" means a housing or assembly into which a sealed source is placed to facilitate the handling and use of the source in well logging.

"Subsurface tracer study" means the release of unsealed license material or a substance labeled with licensed material in a single well for the purpose of tracing the movement or position of the material or substance in the well or adjacent formation.

"Surface casing for protecting fresh water aquifers" means a pipe or tube used as a lining in a well to isolate fresh water aquifers from the well.

"Temporary jobsite" means a place where licensed materials are present for the purpose of performing well logging or subsurface tracer studies.

"Uranium sinker bar" means a weight containing depleted uranium used to pull a logging tool toward the bottom of a well.

"Well" means a drilled hole in which well logging may be performed. As used in this part, "well" includes drilled holes for the purpose of oil, gas, mineral, groundwater, or geological exploration.

"Well logging" means all operations involving the lowering and raising of measuring devices or tools which contain licensed material or are used to detect licensed materials in wells for the purpose of obtaining information about the well or adjacent formations which may be used in oil, gas, mineral, groundwater, or geological exploration.

§ 39.5 Interpretations.

Except as specifically authorized by the Commission in writing, no interpretation of the meaning of the regulations in this part by any officer or employee of the Commission, other than a written interpretation by the General Counsel, will be recognized to be binding upon the Commission.

§ 39.8 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S. 3501 et seq.) OMB has approved the information collection requirements contained in this part under control number 3150-0130.

(b) The approved information collection requirements contained in this part appear in §§ 39.11, 39.13, 39.15, 39.31, 39.33, 39.35, 39.37, 39.39, 39.43, 39.49, 39.51, 39.61, 39.65, 39.67, 39.73, 39.75, and 39.77.

(c) This part contains information collection requirements in addition to those approved under the control number specified in paragraph (a) of this section. These information collection requirements and the control numbers under which they are approved are as follows:

(1) In § 39.11, Form NRC-313 is approved under control number 3150-0120.

Subpart B—Specific Licensing Requirements

§ 39.11 Application for a specific license.

A person, as defined in § 30.4 of this chapter, shall file an application for a specific license authorizing the use of licensed material in well logging on Form NRC 313, "Application for Material License." Each application for a license, other than a license exempted from Part 170 of this chapter, must be accompanied by the fee prescribed in § 170.31 of this chapter. The application must be sent to the appropriate NRC Regional Office listed in Appendix D of Part 20 of this chapter.

§ 39.13 Specific licenses for well logging.

The Commission will approve an application for a specific license for the use of licensed material in well logging if the applicant meets the following requirements:

(a) The applicant shall satisfy the general requirements specified in § 30.33 of this chapter for byproduct material, in § 40.32 of this chapter for source material, and in § 70.33 of this chapter for special nuclear material, as appropriate, and any special requirements contained in this part.

(b) The applicant shall develop a program for training logging supervisors and logging assistants and submit to the Commission a description of this program which specifies the—

(1) Initial training;

(2) On-the-job training;

(3) Annual safety reviews provided by the licensee;

(4) Means the applicant will use to demonstrate the logging supervisor's knowledge and understanding of and ability to comply with the Commission's regulations and licensing requirements and the applicant's operating and emergency procedures; and

(5) Means the applicant will use to demonstrate the logging assistant's knowledge and understanding of and ability to comply with the applicant's operating and emergency procedures.

(c) The applicant shall submit to the Commission written operating and emergency procedures as described in § 39.63 or an outline or summary of the procedures that includes the important radiation safety aspects of the procedures.

(d) The applicant shall establish and submit to the Commission its program for annual inspections of the job performance of each logging supervisor to ensure that the Commission's regulations, license requirements, and the applicant's operating and emergency procedures are followed. Inspection records must be retained for 3 years after each annual internal inspection.

(e) The applicant shall submit a description of its overall organizational structure as it applies to the radiation safety responsibilities in well logging, including specified delegations of authority and responsibility.

(f) If an applicant wants to perform leak testing of sealed sources, the applicant shall identify the manufacturers and the model numbers of the leak test kits to be used. If the applicant wants to analyze its own wipe samples, the applicant shall establish procedures to be followed and submit a description of these procedures to the Commission. The description must include the—

(1) Instruments to be used;

(2) Methods of performing the analysis; and

(3) Pertinent experience of the person who will analyze the wipe samples.

§ 39.15 Agreement with well owner or operator.

(a) A licensee may perform well logging with a sealed source only after the licensee has a written agreement with the employing well owner or operator. This written agreement must identify who will meet the following requirements:

(1) If a sealed source becomes lodged in the well, a reasonable effort will be made to recover it.

(2) A person may not attempt to recover a sealed source in a manner which, in the licensee's opinion, could result in its rupture.

(3) The radiation monitoring required in § 39.69(a) will be performed.

(4) If the environment, any equipment, or personnel are contaminated with licensed material, they must be decontaminated before release from the site or release for unrestricted use. And

(5) If the sealed source is classified as irretrievable after reasonable efforts at recovery have been expended, the following requirements must be implemented within 30 days:

(i) Each irretrievable well logging source must be immobilized and sealed in place with a cement plug.

(ii) A mechanical device to prevent inadvertent intrusion on the source must be set at some point in the well above the cement plug, unless the cement plug and source are not accessible to any subsequent drilling operations. And

(iii) A permanent identification plaque, constructed of long lasting material such as stainless steel, brass, bronze, or monel, must be mounted at the surface of the well, unless the mounting of the plaque is not practical. The size of the plaque must be at least 7 inches (17 cm) square and 1/8-inch (3 mm) thick. The plaque must contain—

(A) The word "CAUTION";

(B) The radiation symbol (the color requirement in § 20.203 of this chapter need not be met);

(C) The date the source was abandoned;

(D) The name of the well owner or well operator, as appropriate;

(E) The well name and well identification number(s) or other designation;

(F) An identification of the sealed source(s) by radionuclide and quantity;

(G) The depth of the source and depth to the top of the plug; and

(H) An appropriate warning, such as, "DO NOT RE-ENTER THIS WELL."

(b) The licensee shall retain a copy of the written agreement for 3 years after the completion of the well logging operation.

(c) A licensee may apply, pursuant to § 39.91, for Commission approval, on a case-by-case basis, of proposed procedures to abandon an irretrievable well logging source in a manner not otherwise authorized in paragraph (a)(5) of this section.

(d) A written agreement between the licensee and the well owner or operator is not required if the licensee and the well owner or operator are part of the same corporate structure or otherwise similarly affiliated. However, the licensee shall still otherwise meet the requirements in paragraphs (a)(1) through (a)(5).

§ 39.17 Request for written statements.

Each license is issued with the condition that the licensee will, at any time before expiration of the license, upon the Commission's request, submit written statements, signed under oath or affirmation, to enable the Commission to determine whether or not the license should be modified, suspended, or revoked.

Subpart C—Equipment

§ 39.31 Labels, security, and transportation precautions.

(a) *Labels.*

(1) The licensee may not use a source, source holder, or logging tool that contains licensed material unless the smallest component that is transported as a separate piece of equipment with the licensed material inside bears a durable, legible, and clearly visible marking or label. The marking or label must contain the radiation symbol specified in § 20.203 of this chapter, without the conventional color requirements, and the wording "DANGER (or CAUTION) RADIOACTIVE MATERIAL."

(2) The licensee may not use a container to store licensed material unless the container has securely attached to it a durable, legible, and clearly visible label. The label must contain the radiation symbol specified in § 20.203 of this chapter and the wording "CAUTION (or DANGER), RADIOACTIVE MATERIAL, NOTIFY CIVIL AUTHORITIES (or NAME OF COMPANY)."

(3) The licensee may not transport licensed material unless the material is packaged, labeled, marked, and accompanied with appropriate shipping papers in accordance with regulations set out in 10 CFR Part 71.

(b) *Security precautions during storage and transportation.* (1) The licensee shall store each source containing licensed material in a storage container or transportation package. The container or package must be locked and physically secured to prevent tampering or removal of licensed material from storage by unauthorized personnel. The licensee shall store licensed material in a manner which will minimize danger from explosion or fire.

(2) The licensee shall lock and physically secure the transport package containing licensed material in the transporting vehicle to prevent accidental loss, tampering, or unauthorized removal of the licensed material from the vehicle.

§ 39.33 Radiation detection instruments.

(a) The licensee shall keep a calibrated and operable radiation survey instrument capable of detecting beta and gamma radiation at each field station and temporary jobsite to make the radiation surveys required by this part and by Part 20 of this chapter. To satisfy this requirement, the radiation survey instrument must be capable of measuring 0.1 milliroentgen 2.58 x 10^{-8} C/kg per hour through at least 50 milliroentgens 1.29 x 10^{-5} C/kg per hour. Survey instruments acquired before July 14, 1987, and capable of measuring 0.1 milliroentgen (2.58 x 10^{-8} C/kg) per hour through at least 20 milliroentgens (5.16 x 10^{-6} C/kg) per hour also satisfy this requirement until July 14, 1992.

(b) The licensee shall have available additional calibrated and operable radiation detection instruments sensitive enough to detect the low radiation and contamination levels that could be encountered if a sealed source ruptured. The licensee may own the instruments or may have a procedure to obtain them quickly from a second party.

(c) The licensee shall have each radiation survey instrument required under paragraph (a) of this section calibrated—

(1) At intervals not to exceed 6 months and after instrument servicing;

(2) For linear scale instruments, at two points located approximately ⅓ and ⅔ of full-scale on each scale; for logarithmic scale instruments, at midrange of each decade, and at two points of at least one decade; and for digital instruments, at appropriate points; and

(3) So that an accuracy within plus or minus 20 percent of the calibration standard can be demonstrated on each scale.

(d) The licensee shall retain calibration records for a period of 3 years after the date of calibration for inspection by the Commission.

§ 39.35 Leak testing of sealed sources.

(a) *Testing and recordkeeping requirements.* Each licensee who uses a sealed source shall have the source tested for leakage periodically. The licensee shall keep a record of leak test results in units of microcuries and retain the record for inspection by the Commission for 3 years after the leak test is performed.

(b) *Method of testing.* The wipe of a sealed source must be performed using a leak test kit or method approved by the Commission or an Agreement State. The wipe sample must be taken from the nearest accessible point to the sealed source where contamination might accumulate. The wipe sample must be analyzed for radioactive contamination. The analysis must be capable of detecting the presence of 0.005 microcurie (185 Bq) of radioactive material on the test sample and must be performed by a person approved by the Commission or an Agreement State to perform the analysis.

(c) *Test frequency.* Each sealed source must be tested at intervals not to exceed 6 months. In the absence of a certificate from a transferor that a test has been made within the 6 months before the transfer, the sealed source may not be used until tested.

(d) *Removal of leaking source from service.* (1) If the test conducted pursuant to paragraphs (a) and (b) of this section reveals the presence of 0.005 microcurie (185 Bq) or more of removable radioactive material, the licensee shall remove the sealed source from service immediately and have it decontaminated, repaired, or disposed of by an NRC or Agreement State licensee that is authorized to perform these functions. The licensee shall check the equipment associated with the leaking source for radioactive contamination and, if contaminated, have it decontaminated or disposed of by an NRC or Agreement State licensee that is authorized to perform these functions.

(2) The licensee shall submit a report to the appropriate NRC Regional Office listed in Appendix D of Part 20 of this chapter, within 5 days of receiving the test results. The report must describe the equipment involved in the leak, the test results, any contamination which resulted from the leaking source, and the corrective actions taken up to the time the report is made.

(e) *Exemptions from testing requirements.* The following sealed sources are exempt from the periodic leak test requirements set out in paragraphs (a) through (d) of this section:

(1) Hydrogen-3 sources;

(2) Sources containing licensed material with a half-life of 30 days or less;

(3) Sealed sources containing licensed material in gaseous form;

(4) Sources of beta- or gamma-emitting radioactive material with an activity of 100 microcuries (3,700,000 Bq) or less; and

(5) Sources of alpha- or neutron-emitting radioactive material with an activity of 10 microcuries (370,000 Bq) or less.

§ 39.37 Physical inventory.

Each licensee shall conduct a semiannual physical inventory to account for all licensed material received and possessed under the license. The licensee shall retain records of the inventory for 3 years from the date of the inventory for inspection by the Commission. The inventory must indicate the quantity and kind of licensed material, the location of the licensed material, the date of the inventory, and the name of the individual conducting the inventory. Physical inventory records may be combined with leak test records.

§ 39.39 Records of material use.

(a) Each licensee shall maintain records for each use of licensed material showing—

(1) The make, model number, and a serial number or a description of each sealed source used;

(2) In the case of unsealed licensed material used for subsurface tracer studies, the radionuclide and quantity of activity used in a particular well and the disposition of any unused tracer materials;

(3) The identity of the logging supervisor who is responsible for the licensed material and the identity of logging assistants present; and

(4) The location and date of use of the licensed material.

(b) The licensee shall make the records required by paragraph (a) of this section available for inspection by the Commission. The licensee shall retain the records for 3 years from the date of the recorded event.

§ 39.41 Design and performance criteria for sealed sources.

(a) After July 14, 1989, a licensee may not use a sealed source in well logging unless the sealed source—

(1) Is doubly encapsulated;

(2) Contains licensed material whose chemical and physical forms are as insoluble and nondispersible as practical; and

(3) The sealed source's prototype has been tested and found to maintain its integrity after each of the following tests:

(i) *Temperature.* The test source must be held at −40 °C for 20 minutes, 600 °C for 1 hour, and then be subject to a thermal shock test with a temperature drop from 600 °C to 20 °C within 15 seconds.

(ii) *Impact Test.* A 5 kg steel hammer, 2.5 cm in diameter, must be dropped from a height of 1 m onto the test source.

(iii) *Vibration test.* The test source must be subject to a vibration from 25 Hz to 500 Hz at 5 g amplitude for 30 minutes.

(iv) *Puncture test.* A 1 gram hammer and pin, 0.3 cm pin diameter, must be dropped from a height of 1 m onto the test source.

(v) *Pressure test.* The test source must be subjected to an external pressure of 24,600 pounds per square inch absolute (1.695×10^7 pascals).

(b) The requirements in paragraph (a) of this section do not apply to sealed sources that contain licensed material in gaseous form.

§ 39.43 Inspection, maintenance, and opening of a source or source holder.

(a) Each licensee shall visually check source holders, logging tools, and source handling tools, for defects before each use to ensure that the equipment is in good working condition and that required labeling is present. If defects are found, the equipment must be removed from service until repaired, and a record must be made listing: the date of check, name of inspector, equipment involved, defects found, and repairs made. These records must be retained for 3 years after the defect is found.

(b) Each licensee shall have a program for semiannual visual inspection and routine maintenance of source holders, logging tools, injection tools, source handling tools, storage containers, transport containers, and uranium sinker bars to ensure that the required labeling is legible and that no physical damage is visible. If defects are found, the equipment must be removed from service until repaired, and a record must be made listing: date, equipment involved, inspection and maintenance operations performed, any defects found, and any actions taken to correct the defects. These records must be retained for 3 years after the defect is found.

(c) Removal of a sealed source from a source holder or logging tool, and maintenance on sealed sources or holders in which sealed sources are contained may not be performed by the licensee unless a written procedure developed pursuant to § 39.63 has been approved either by the Commission pursuant to § 39.13(c) or by an Agreement State.

(d) If a sealed source is stuck in the source holder, the licensee may not perform any operation, such as drilling, cutting, or chiseling, on the source holder unless the licensee is specifically approved by the Commission or an Agreement State to perform this operation.

(e) The opening, repair, or modification of any sealed source must be performed by persons specifically approved to do so by the Commission or an Agreement State.

§ 39.45 Subsurface tracer studies.

(a) The licensee shall require all personnel handling radioactive tracer material to use protective gloves and, if required by the license, other protective clothing and equipment. The licensee shall take precautions to avoid ingestion or inhalation of radioactive tracer material and to avoid contamination of field stations and temporary jobsites.

(b) A licensee may not knowingly inject licensed material into fresh water aquifers unless specifically authorized to do so by the Commission.

§ 39.47 Radioactive markers.

The licensee may use radioactive markers in wells only if the individual markers contain quantities of licensed material not exceeding the quantities specified in § 30.71 of this chapter. The ues of markers is subject only to the requirements of § 39.37.

§ 39.49 Uranium sinker bars.

The licensee may use a uranium sinker bar in well logging after July 14, 1988, only if it is legibly impressed with the words "CAUTION—RADIOACTIVE-DEPLETED URANIUM" and "NOTIFY CIVIL AUTHORITIES (or COMPANY NAME) IF FOUND."

§ 39.51 Use of a sealed source in a well without a surface casing.

The licensee may use a sealed source in a well without a surface casing for protecting fresh water aquifers only if the licensee follows a procedure for reducing the probability of the source becoming lodged in the well. The procedure must be approved by the Commission pursuant to § 39.13(c) or by an Agreement State.

Subpart D—Radiation Safety Requirements

§ 39.61 Training.

(a) The licensee may not permit an individual to act as a logging supervisor until that person—

(1) Has completed training in the subjects outlined in paragraph (e) of this section;

(2) Has received copies of, and instruction in—

(i) The NRC regulations contained in the applicable sections of Parts 19, 20, and 39 of this chapter;

(ii) The NRC license under which the logging supervisor will perform well logging; and

(iii) The licensee's operating and emergency procedures required by § 39.63;

(3) Has completed on-the-job training and demonstrated competence in the use of licensed materials, remote handling tools, and radiation survey instruments by a field evaluation; and

(4) Has demonstrated understanding of the requirements in paragraphs (a)(1) and (2) of this section by successfully completing a written test.

(b) The licensee may not permit an individual to act as a logging assistant until that person—

(1) Has received instruction in applicable sections of Parts 19 and 20 of this chapter;

(2) Has received copies of, and instruction in, the licensee's operating and emergency procedures required by § 39.63;

(3) Has demonstrated understanding of the materials listed in paragraphs (b)(1) and (2) of this section by successfully completing a written or oral test; and

(4) Has received instruction in the use of licensed materials, remote handling tools, and radiation survey instruments, as appropriate for the logging assistant's intended job responsibilities.

(c) The licensee shall provide safety reviews for logging supervisors and logging assistants at least once during each calendar year.

(d) The licensee shall maintain a record on each logging supervisor's and logging assistant's training and annual safety review. The training records must include copies of written tests and dates of oral tests given after July 14, 1987. The training records must be retained until 3 years following the termination of employment. Records of annual safety reviews must list the topics discussed and be retained for 3 years.

(e) The licensee shall include the following subjects in the training required in paragraph (a)(1) of this section:

(1) Fundamentals of radiation safety including—

(i) Characteristics of radiation;

(ii) Units of radiation dose and quantity of radioactivity;

(iii) Hazards of exposure to radiation;

(iv) Levels of radiation from licensed material;

(v) Methods of controlling radiation dose (time, distance, and shielding); and

(vi) Radiation safety practices, including prevention of contamination, and methods of decontamination.

(2) Radiation detection instruments including—

(i) Use, operation, calibration, and limitations of radiation survey instruments;

(ii) Survey techniques; and

(iii) Use of personnel monitoring equipment;

(3) Equipment to be used including—

(i) Operation of equipment, including source handling equipment and remote handling tools;

(ii) Storage, control, and disposal of licensed material; and

(iii) Maintenance of equipment.

(4) The requirements of pertinent Federal regulations. And

(5) Case histories of accidents in well logging.

§ 39.63 Operating and emergency procedures.

Each licensee shall develop and follow written operating and emergency procedures that cover—

(a) The handling and use of licensed materials including the use of sealed sources in wells without surface casing for protecting fresh water aquifers, if appropriate;

(b) The use of remote handling tools for handling sealed sources and radioactive tracer material except low-activity calibration sources;

(c) Methods and occasions for conducting radiation surveys, including surveys for detecting contamination, as required by § 39.67(c)-(e);

(d) Minimizing personnel exposure including exposures from inhalation and ingestion of licensed tracer materials;

(e) Methods and occasions for locking and securing stored licensed materials;

(f) Personnel monitoring and the use of personnel monitoring equipment;

(g) Transportation of licensed materials to field stations or temporary jobsites, packaging of licensed materials for transport in vehicles, placarding of vehicles when needed, and physically securing licensed materials in transport vehicles during transportation to prevent accidental loss, tampering, or unauthorized removal;

(h) Picking up, receiving, and opening packages containing licensed materials, in accordance with § 20.205 of this chapter;

(i) For the use of tracers, decontamination of the environment, equipment, and personnel;

(j) Maintenance of records generated by logging personnel at temporary jobsites;

(k) The inspection and maintenance of sealed sources, source holders, logging tools, injection tools, source handling tools, storage containers, transport containers, and uranium sinker bars as required by § 39.43;

(l) Identifying and reporting to NRC defects and noncompliance as required by Part 21 of this chapter;

(m) Actions to be taken if a sealed source is lodged in a well;

(n) Notifying proper persons in the event of an accident; and

(o) Actions to be taken if a sealed source is ruptured including actions to prevent the spread of contamination and minimize inhalation and ingestion of licensed materials and actions to obtain suitable radiation survey instruments as required by § 39.33(b).

§ 39.65 Personnel monitoring.

(a) The licensee may not permit an individual to act as a logging supervisor or logging assistant unless that person wears, at all times during the handling of licensed radioactive materials, either a film badge or a thermoluminescent dosimeter (TLD). Each film badge or TLD must be assigned to and worn by only one individual. Film badges must be replaced at least monthly and TLDs replaced at least quarterly. After replacement, each film badge or TLD must be promptly processed.

(b) The licensee shall provide bioassay services to individuals using licensed materials in subsurface tracer studies if required by the license.

(c) The licensee shall retain records of film badge, TLD and bioassay results for inspection until the Commission authorizes disposition of the records.

§ 39.67 Radiation surveys.

(a) The licensee shall make radiation surveys, including but not limited to the surveys required under paragraphs (b) through (e) of this section, of each area where licensed materials are used and stored.

(b) Before transporting licensed materials, the licensee shall make a radiation survey of the position occupied by each individual in the vehicle and of the exterior of each vehicle used to transport the licensed materials.

(c) If the sealed source assembly is removed from the logging tool before departure from the temporary jobsite, the licensee shall confirm that the logging tool is free of contamination by energizing the logging tool detector or by using a survey meter.

(d) If the licensee has reason to believe that, as a result of any operation involving a sealed source, the encapsulation of the sealed source could be damaged by the operation, the licensee shall conduct a radiation survey, including a contamination survey, during and after the operation.

(e) The licensee shall make a radiation survey at the temporary jobsite before and after each subsurface tracer study to confirm the absence of contamination.

(f) The results of surveys required under paragraphs (a) through (e) of this section must be recorded and must include the date of the survey, the name of the individual making the survey, the identification of the survey, instrument used, and the location of the survey. The licensee shall retain records of surveys for inspection by the Commission for 3 years after they are made.

§ 39.69 Radioactive contamination control.

(a) If the licensee detects evidence that a sealed source has ruptured or licensed materials have caused contamination, the licensee shall initiate immediately the emergency procedures required by § 39.63.

(b) If contamination results from the use of licensed material in well logging, the licensee shall decontaminate all work areas, equipment, and unrestricted areas.

(c) During efforts to recover a sealed source lodged in the well, the licensee shall continuously monitor, with an appropriate radiation detection instrument or a logging tool with a radiation detector, the circulating fluids from the well, if any, to check for contamination resulting from damage to the sealed source.

Subpart E—Security, Records, Notifications

§ 39.71 Security.

(a) A logging supervisor must be physically present at a temporary jobsite whenever licensed material are being handled or are not stored and locked in a vehicle or storage place. The logging supervisor may leave the jobsite in order to obtain assistance if a source becomes lodged in a well.

(b) During well logging, except when radiation sources are below ground or in shipping or storage containers, the logging supervisor or other individual designated by the logging supervisor shall maintain direct surveillance of the operation to prevent unauthorized entry into a restricted area, as defined in § 20.3 of this chapter.

§ 39.73 Documents and records required at field stations.

Each licensee shall maintain the following documents and records at the field station:

(a) A copy of Parts 19, 20, and 39 of NRC regulations;

(b) The license authorizing the use of licensed material;

(c) Operating and emergency procedures required by § 39.63;

(d) The record of radiation survey instrument calibrations required by § 39.33;

(e) The record of leak test results required by § 39.35;

(f) Physical inventory records required by § 39.37;

(g) Utilization records required by § 39.39;

(h) Records of inspection and maintenance required by § 39.43;

(i) Training records required by § 39.61(d); and

(j) Survey records required by § 39.67.

§ 39.75 Documents and records required at temporary jobsites.

Each licensee conducting operations at a temporary jobsite shall maintain the following documents and records at the temporary jobsite until the well logging operation is completed:

(a) Operating and emergency procedures required by § 39.63.

(b) Evidence of latest calibration of the radiation survey instruments in use at the site required by § 39.33.

(c) Latest survey records required by §§ 39.67 (b), (c), and (e).

(d) The shipping papers for the transportation of radioactive materials required by § 71.5 of this chapter; and

(e) When operating under reciprocity pursuant to § 150.20 of this chapter, a copy of the Agreement State license authorizing use of licensed materials.

§ 39.77 Notification of incidents and lost sources; abandonment procedures for irretrievable sources.

(a) The licensee shall immediately notify the appropriate NRC Regional Office by telephone and subsequently, within 30 days, by confirmatory letter if the licensee knows or has reason to believe that a sealed source has been ruptured. The letter must designate the well or other location, describe the magnitude and extent of the escape of licensed materials, assess the consequences of the rupture, and explain efforts planned or being taken to mitigate these consequences.

(b) The licensee shall notify the Commission of the theft or loss of radioactive materials, radiation overexposures, excessive levels and concentrations of radiation, and certain other accidents as required by §§ 20.402, 20.403, and 20.405 of this chapter.

(c) If a sealed source becomes lodged in a well, and when it becomes apparent that efforts to recover the sealed source will not be successful, the licensee shall—

(1) Notify the appropriate NRC Regional Office by telephone of the circumstances that resulted in the inability to retrieve the source and obtain approval to implement abandonment procedures; and

(2) Advise the well owner or operator, as appropriate, of the abandonment procedures under § 39.15 (a) or (c); and

(3) Either ensure that abandonment procedures are implemented within 30 days after the sealed source has been classified as irretrievable or request an extension of time if unable to complete the abandonment procedures.

(d) The licensee shall, within 30 days after a sealed source has been classified as irretrievable, make a report in writing to the appropriate NRC Regional Office. The licensee shall send a copy of the report to each appropriate State or Federal agency that issued permits or otherwise approved of the drilling operation. The report must contain the following information:

(1) Date of occurrence;

(2) A description of the irretrievable well logging source involved including the radionuclide and its quantity, chemical, and physical form;

(3) Surface location and identification of the well;

(4) Results of efforts to immobilize and seal the source in place;

(5) A brief description of the attempted recovery effort;

(6) Depth of the source;

(7) Depth of the top of the cement plug;

(8) Depth of the well;

(9) Any other information, such as a warning statement, contained on the permanent identification plaque; and

(10) State and Federal agencies receiving copy of this report.

Subpart F—Exemptions

§ 39.91 Applications for exemptions.

The Commission may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this part as it determines are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest.

Subpart G—Enforcement

§ 39.101 Violations.

(a) An injunction or other court order may be obtained to prohibit a violation of any provision of this part.

(b) A court order may be obtained for the payment of a civil penalty imposed for violation of this part.

(c) Any person who willfully violates any provision of this part issued under section 161 b., i., or o. of the Atomic Energy Act of 1954, as amended, or the provisions cited in the authority citation at the beginning of this part may be guilty of a crime and, upon conviction, may be punished by fine or imprisonment, or both, as provided by law.

PART 40—DOMESTIC LICENSING OF SOURCE MATERIAL

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Appendix A—Criteria Relating to the Operation of Uranium Mills and the Disposition of Tailings or Wastes Produced by the Extraction or Concentration of Source Material From Ores Processed Primarily From Their Source Material Content

Authority: Secs. 62, 63, 64, 65, 81, 161, 182, 183, 186, 68 Stat. 932, 933, 935, 948, 953, 954, 955, as amended, secs. 11e(2), 83, 84, Public Law 95-604, 92 Stat. 3033, as amended, 3039, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2014(e)(2), 2092, 2093, 2094, 2095, 2111, 2113, 2114, 2201, 2232, 2233, 2236, 2282); sec. 274, Public Law 86-373, 73 Stat. 688 (42 U.S.C. 2021); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); sec. 275, 92 Stat. 3021, as amended by Public Law 97-415, 96 Stat. 2067 (42 U.S.C. 2022).

Section 40.7 also issued under Public Law 95-601, sec. 10, 92 Stat. 2951 (42 U.S.C. 5851). Section 40.31(g) also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Section 40.46 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 40.71 also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273); §§ 40.3, 40.7(g), 40.25(d) (1)-(3), 40.35 (a)-(d) and (f), 40.41 (b) and (c), 40.46, 40.51 (a) and (c), and 40.63 are issued under secs. 161b, 161i and 161o, 68 Stat. 948, 949, and 950 as amended (42 U.S.C. 2201(b), 2201(i), and 2201(o)); and §§ 40.5, 40.9, 40.25 (c), (d) (3), and (4), 40.26(c)(2), 40.35(e), 40.42, 40.61, 40.62, 40.64, and 40.65 are issued under sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

Source: 26 FR 284, Jan. 14, 1961, unless otherwise noted.

General Provisions

§ 40.1 Purpose.

(a) The regulations in this part establish procedures and criteria for the issuance of licenses to receive title to, receive, possess, use, transfer, or deliver source and byproduct materials, as defined in this part, and establish and provide for the terms and conditions upon which the Commission will issue these licenses. These regulations also provide for the disposal of byproduct material and for the long-term care and custody of byproduct material and residual radioactive material. The regulations in this part also establish certain requirements for the physical protection of import, export, and transient shipments of natural uranium. (Additional requirements applicable to the import and export of natural uranium are set forth in part 110 of this chapter.)

(b) The regulations contained in this part are issued under the Atomic Energy Act of 1954, as amended (68 Stat. 919), Title II of the Energy Reorganization Act of 1974, as amended (88 Stat. 1242), and Titles I and II of the Uranium Mill Tailings Radiation Control Act of 1978, as amended (42 U.S.C. 7901).

[55 FR 45597, Oct. 30, 1990]

§ 40.2 Scope.

Except as provided in §§ 40.11 to 40.14 of this part, inclusive, the regulations in this part apply to all persons in the United States.

§ 40.2a Coverage of inactive tailings sites.

(a) Prior to the completion of the remedial action, the Commission will not require a license pursuant to 10 CFR Chapter I for possession of residual radioactive materials as defined in this part that are located at a site where milling operations are no longer active, if the site is covered by the remedial action program of Title I of the Uranium Mill Tailings Radiation Control Act of 1978, as amended. The Commission will exert its regulatory role in remedial actions primarily through concurrence and consultation in the execution of the remedial action pursuant to Title I of the Uranium Mill Tailings Radiation Control Act of 1978, as amended. After remedial actions are completed, the Commission will license the long-term care of sites, where residual radioactive materials are disposed, under the requirements set out in § 40.27.

(b) The Commission will regulate byproduct material as defined in this part that is located at a site where milling operations are no longer active, if such site is not covered by the remedial action program of Title I of the Uranium Mill Tailings Radiation Control Act of 1978. The criteria in Appendix A of this part will be applied to such sites.

[45 FR 65531, Oct. 3, 1980, as amended at 55 FR 45598, Oct. 30, 1990]

§ 40.3 License requirements.

A person subject to the regulations in this part may not receive title to, own, receive, possess, use, transfer, provide for long-term care, deliver or dispose of byproduct material or residual radioactive material as defined in this part or any source material after removal from its place of deposit in nature, unless authorized in a specific or general license issued by the Commission under the regulations in this part.

[55 FR 45598, Oct. 30, 1990]

§ 40.4 Definitions.

Act means the Atomic Energy Act of 1954 (68 Stat. 919), including any amendments thereto;

Agreement State means any State with which the Atomic Energy Commission or the Nuclear Regulatory Commission has entered into an effective agreement under subsection 274b. of the Atomic Energy Act of 1954, as amended.

Alert means events may occur, are in progress, or have occurred that could lead to a release of radioactive material but that the release is not expected to require a response by offsite response organizations to protect persons offsite.

Byproduct Material means the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content, including discrete surface wastes resulting from uranium solution extraction processes. Underground ore bodies depleted by such solution extraction operations do not constitute "byproduct material" within this definition.

With the exception of "byproduct material" as defined in section 11e. of the Act, other terms defined in section 11 of the Act shall have the same meaning when used in the regulations in this part.

Commencement of construction means any clearing of land, excavation, or other substantial action that would adversely affect the natural environment of a site but does not include changes desirable for the temporary use of the land for public recreational uses, necessary borings to determine site characteristics or other preconstruction monitoring to establish background information related to the suitability of a site or to the protection of environmental values.

Commission means the Nuclear Regulatory Commission or its duly authorized representatives.

Decommission means to remove (as a facility) safely from service and reduce residual radioactivity to a level that permits release of the property for unrestricted use and termination of license.

Department and *Department of Energy* means the Department of Energy established by the Department of Energy Organization Act (Pub. L. 95-91, 91 Stat. 565, 42 U.S.C. 7101 *et seq.*) to the extent that the Department, or its duly authorized representatives, exercises functions formerly vested in the U.S. Atomic Energy Commission, its Chairman, members, officers and components and transferred to the U.S. Energy Research and Development Administration and to the Administrator thereof pursuant to sections 104 (b), (c) and (d) of the Energy Reorganization Act of 1974 (Pub. L. 93-438, 88 Stat. 1233 at 1237, 42 U.S.C. 5814) and retransferred to the Secretary of Energy pursuant to section 301(a) of the Department of Energy Organization Act (Pub. L. 95-91, 91 Stat. 565 at 577-578, 42 U.S.C. 7151).

Depleted uranium means the source material uranium in which the isotope uranium-235 is less than 0.711 weight percent of the total uranium present. Depleted uranium does not include special nuclear material.

Effective kilogram means (1) for the source material uranium in which the uranium isotope uranium-235 is greater than 0.005 (0.5 weight percent) of the total uranium present: 10,000 kilograms, and (2) for any other source material: 20,000 kilograms.

Government agency means any executive department, commission, independent establishment, corporation, wholly or partly owned by the United

States of America which is an instrumentality of the United States, or any board, bureau, division, service, office, officer, authority, administration, or other establishment in the executive branch of the Government.

License, except where otherwise specified, means a license issued pursuant to the regulations in this part.

Persons means: (1) Any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, Government agency other than the Commission or the Department of Energy except that the Department of Energy shall be considered a person within the meaning of the regulations in this part to the extent that its facilities and activities are subject to the licensing and related regulatory authority of the Commission pursuant to section 202 of the Energy Reorganization Act of 1974 (88 Stat. 1244)[1] and the Uranium Mill Tailings Radiation Control Act of 1978 (92 Stat. 3021), any State or any political subdivision of, or any political entity within a State, any foreign government or nation or any subdivision of any such government or nation, or other entity; and (2) any legal successor, representative, agent or agency of the foregoing.

Pharmacist means an individual registered by a state or territory of the United States, the District of Columbia or the Commonwealth of Puerto Rico to compound and dispense drugs, prescriptions and poisons.

Physician means a medical doctor or doctor of osteopathy licensed by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to prescribe drugs in the practice of medicine.

Residual radioactive material means: (1) Waste (which the Secretary of Energy determines to be radioactive) in the form of tailings resulting from the processing of ores for the extraction of uranium and other valuable constituents of the ores; and (2) other waste (which the Secretary of Energy determines to be radioactive) at a processing site which relates to such processing, including any residual stock of unprocessed ores or low-grade materials. This term is used only with respect to materials at sites subject to remediation under Title I of the Uranium Mill Tailings Radiation Control Act of 1978, as amended.

Site area emergency means events may occur, are in progress, or have occurred that could lead to a significant release of radioactive material and that could require a response by offsite response organizations to protect persons offsite.

Source Material means: (1) Uranium or thorium, or any combination thereof, in any physical or chemical form or (2) ores which contain by weight one-twentieth of one percent (0.05%) or more of: (i) Uranium, (ii) thorium or (iii) any combination thereof. Source material does not include special nuclear material.

Special nuclear material means: (1) Plutonium, uranium 233, uranium enriched in the isotope 233 or in the isotope 235, and any other material which the Commission, pursuant to the provisions of section 51 of the Act, determines to be special nuclear material; or (2) any material artificially enriched by any of the foregoing.

Transient shipment means a shipment of nuclear material, originating and terminating in foreign countries, on a vessel or aircraft that stops at a United States port.

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[1] The Department of Energy facilities and activities identified in section 202 are:

(1) Demonstration Liquid Metal Fast Breeder reactors when operated as part of the power generation facilities of an electric utility system, or when operated in any other manner for the purpose of demonstrating the suitability for commercial application of such a reactor.

(2) Other demonstration nuclear reactors, except those in existence on January 19, 1975, when operated as part of the power generation facilities of an electric utility system, or when operated in any other manner for the purpose of demonstrating the suitability for commercial application of such a reactor.

(3) Facilities used primarily for the receipt and storage of high-level radioactive wastes resulting from licensed activities.

(4) Retrievable Surface Storage Facilities and other facilities authorized for the express purpose of subsequent long-term storage of high-level radioactive waste generated by the Department of Energy, which are not used for, or are part of, research and development activities.

United States, when used in a geographical sense, includes Puerto Rico and all territories and possessions of the United States.

Unrefined and unprocessed ore means ore in its natural form prior to any processing, such as grinding, roasting or beneficiating, or refining.

Uranium Milling means any activity that results in the production of byproduct material as defined in this part.

[26 FR 284, Jan. 14, 1961, as amended at 30 FR 15285, Dec. 10, 1965]

EDITORIAL NOTE: For additional FEDERAL REGISTER citations affecting § 40.4, see the List of CFR Sections Affected in the Finding Aids section of this volume.

§ 40.5 Communications.

(a) Unless otherwise specified or covered under the regional licensing program as provided in paragraph (b) of this section, any communication or report concerning the regulations in this part and any application filed under these regulations may be submitted to the Commission as follows:

(1) By mail addressed to: Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

(2) By delivery in person to the Commission's offices to the Director, Office of Nuclear Material Safety and Safeguards at:

(i) 1130 L Street, NW., Washington, D.C.; or

(ii) 11555 Rockville Pike, One White Flint North, Rockville, Maryland.

(b) The Commission has delegated to the five Regional Administrators licensing authority for selected parts of its decentralized licensing program for nuclear materials as described in paragraph (b)(1) of this section. Any communication, report, or application covered under this licensing program must be submitted as specified in paragraph (b)(2) of this section.

(1) The delegated licensing program includes authority to issue, renew, amend, cancel, modify, suspend, or revoke licenses for nuclear materials issued pursuant to 10 CFR Parts 30 through 35, 39, 40, and 70 to all persons for academic, medical, and industrial uses, with the following exceptions:

(i) Activities in the fuel cycle and special nuclear material in quantities sufficient to constitute a critical mass in any room or area. This exception does not apply to license modifications relating to termination of special nuclear material licenses that authorize possession of larger quantities when the case is referred for action from NRC's Headquarters to the Regional Administrators.

(ii) Health and safety design review of sealed sources and devices and approval, for licensing purposes, of sealed sources and devices.

(iii) Processing of source material for extracting of metallic compounds (including Zirconium, Hafnium, Tantalum, Titanium, Niobium, etc.).

(iv) Distribution of products containing radioactive material to persons exempt pursuant 10 CFR 32.11 through 32.26.

(v) New uses or techniques for use of byproduct, source, or special nuclear material.

(2) *Submission*—(i) *Region I.* The regional licensing program involves all Federal facilities in the region and non-Federal licensees in the following Region I non-Agreement States and the District of Columbia: Connecticut, Delaware, Maine, Massachusetts, New Jersey, Pennsylvania, and Vermont. All inquiries, communications, and applications for a new license or an amendment or renewal of an existing license specified in paragraph (b)(1) of this section must be sent to: U.S. Nuclear Regulatory Commission, Region I, 475 Allendale Road, King of Prussia, Pennsylvania 19406.

(ii) *Region II.* The regional licensing program involves all Federal facilities in the region and non-Federal licensees in the following Region II non-Agreement states and territories: Virginia, West Virginia, Puerto Rico, and the Virgin Islands. All inquiries, communications, and applications for a new license or an amendment to an existing license specified in paragraph (b)(1) of this section must be sent to: U.S. Nuclear Regulatory Commission, Region II, Material Radiation Protection Section, 101 Marietta Street, NW, Suite 2900, Atlanta, Georgia 30323.

(iii) *Region III.* The regional licensing program involves all Federal facilities in the region and non-Federal licensees in the following Region III non-Agreement States: Indiana, Michigan, Minnesota, Missouri, Ohio, and Wisconsin. All inquiries, communications, and applications for a new license or an amendment or renewal of an existing license specified in paragraph (b)(1) of this section must be sent to: U.S. Nuclear Regulatory Commission, Region III, Material Licensing Section, 799 Roosevelt Road, Glen Ellyn, Illinois 60137.

(iv) *Region IV.* The regional licensing program involves all Federal facilities in the region and non-Federal licensees in the following Region IV non-Agreement States: Montana, Oklahoma, South Dakota, and Wyoming. All inquiries, communications, and applications for a new license or an amendment or renewal of an existing license specified in paragraph (b)(1) of this section must be sent to: U.S. Nuclear Regulatory Commission, Region IV, Material Radiation Protection Section, 611 Ryan Plaza Drive, Suite 1000, Arlington, Texas 76011.

(v) *Region V.* The regional licensing program involves all Federal facilities in the region and non-Federal licensees in the following Region V non-Agreement States and a territory: Alaska, Hawaii, and Guam. All inquiries, communications and applications for a new license or an amendment or renewal of an existing license specified in paragraph (b)(1) of this section must be sent to: U.S. Nuclear Regulatory Commission, Region V, Material Radiation Protection Section, 1450 Maria Lane, Suite 210, Walnut Creek, California 94596.

[48 FR 16031, Apr. 14, 1983, as amended at 49 FR 19631, May 9, 1984; 49 FR 47824, Dec. 7, 1984; 50 FR 14694, Apr. 15, 1985; 51 FR 36001, Oct. 8, 1986; 52 FR 8241, Mar. 17, 1987; 52 FR 38392, Oct. 16, 1987; 52 FR 48093, Dec. 18, 1987; 53 FR 3862, Feb. 10, 1988; 53 FR 4110, Feb. 12, 1988; 53 FR 43420, Oct. 27, 1988]

§ 40.6 Interpretations.

Except as specifically authorized by the Commission in writing, no interpretation of the meaning of the regulations in this part by any officer or employee of the Commission other than a written interpretation by the General Counsel will be recognized to be binding upon the Commission.

§ 40.7 Employee protection.

(a) Discrimination by a Commission licensee, an applicant for a Commission license, or a contractor or subcontractor of a Commission licensee or applicant against an employee for engaging in certain protected activities is prohibited. Discrimination includes discharge and other actions that relate to compensation, terms, conditions, and privileges of employment. The protected activities are established in section 210 of the Energy Reorganization Act of 1974, as amended, and in general are related to the administration or enforcement of a requirement imposed under the Atomic Energy Act or the Energy Reorganization Act.

(1) The protected activities include but are not limited to:

(i) Providing the Commission information about possible violations of requirements imposed under either of the above statutes;

(ii) Requesting the Commission to institute action against his or her employer for the administration or enforcement of these requirements; or

(iii) Testifying in any Commission proceeding.

(2) These activities are protected even if no formal proceeding is actually initiated as a result of the employee assistance or participation.

(3) This section has no application to any employee alleging discrimination prohibited by this section who, acting without direction from his or her employer (or the employer's agent), deliberately causes a violation of any requirement of the Energy Reorganization Act of 1974, as amended, or the Atomic Energy Act of 1954, as amended.

(b) Any employee who believes that he or she has been discharged or otherwise discriminated against by any person for engaging in the protected activities specified in paragraph (a)(1) of this section may seek a remedy for the discharge or discrimination through an administrative proceeding in the Department of Labor. The administrative proceeding must be initiated within 30 days after an alleged violation occurs by filing a complaint alleging the violation with the Department of Labor, Employment Standards Administration, Wage and Hour Division. The Department of Labor may order reinstatement, back pay, and compensatory damages.

(c) A violation of paragraph (a) or paragraph (g) of this section by a Commission licensee, an applicant for a Commission license, or a contractor or subcontractor of a Commission licensee or applicant may be grounds for—

(1) Denial, revocation, or suspension of the license.

(2) Imposition of a civil penalty on the licensee or applicant.

(3) Other enforcement action.

(d) Actions taken by an employer, or others, which adversely affect an employee may be predicated upon nondiscriminatory grounds. The prohibition applies when the adverse action occurs because the employee has engaged in protected activities. An employee's engagement in protected activities does not automatically render him or her immune from discharge or discipline for legitimate reasons or from adverse action dictated by non-prohibited considerations.

(e) Each licensee and each applicant shall post Form NRC-3, "Notice to Employees," on its premises. Posting must be at locations sufficient to permit employees protected by this section to observe a copy on the way to or from their place of work. Premises must be posted not later than 30 days after an application is docketed and remain posted while the application is pending before the Commission, during the term of the license, and for 30 days following license termination.

Note: Copies of Form NRC-3 may be obtained by writing to the Regional Administrator of the appropriate U.S. Nuclear Regulatory Commission Regional Office listed in Appendix D, Part 20 of this chapter.

(f) The general licenses provided in §§ 40.21, 40.22, 40.25, 40.27, and 40.28 are exempt from paragraph (e) of this section.

(g) No agreement affecting the compensation, terms, conditions and privileges of employment, including an agreement to settle a complaint filed by an employee with the Department of Labor pursuant to section 210 of the Energy Reorganization Act of 1974, may contain any provision which would prohibit, restrict, or otherwise discourage, an employee from participating in protected activity as defined in paragraph (a)(1) of this section, including, but not limited to, providing information to the NRC on potential violations or other matters within NRC's regulatory responsibilities.

[47 FR 30455, July 14, 1982, as amended at 52 FR 31611, Aug. 21, 1987; 55 FR 10404, Mar. 21, 1990; 55 FR 45598, Oct. 30, 1990]

§ 40.8 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). OMB has approved the information collection requirements contained in this part under control number 3150-0020.

(b) The approved information collection requirements contained in this part appear in §§ 40.25, 40.26, 40.31, 40.35, 40.42, 40.61, 40.64, 40.65, and Appendix A.

(c) This part contains information collection requirements in addition to those approved under the control number specified in paragraph (a) of this section. These information collection requirements and the control numbers under which they are approved are as follows:

(1) In §§40.31, 40.43, 40.44, and Appendix A, Form NRC-2 is approved under control number 3150-0019.

(2) In § 40.31, Form N-71 is approved under control number 3150-0056.

(3) In § 40.42, Form NRC-314 is approved under control number 3150-0028.

(4) In § 40.64, Form NRC-741 is approved under control number 3150-0003.

[49 FR 19626, May 9, 1984]

§ 40.9 Completeness and accuracy of information.

(a) Information provided to the Commission by an applicant for a license or by a licensee or information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.

(b) Each applicant or licensee shall notify the Commission of information identified by the applicant or licensee as having for the regulated activity a significant implication for public health and safety or common defense and security. An applicant or licensee violates this paragraph only if the applicant or licensee fails to notify the Commission of information that the applicant or licensee has identified as having a significant implication for public health and safety or common defense and security. Notification shall be provided to the Administrator of the appropriate Regional Office within two working days of identifying the information. This requirement is not applicable to information which is already required to be provided to the Commission by other reporting or undating requirements.

[52 FR 49371, Dec. 31, 1987]

EXEMPTIONS

§ 40.11 Persons using source material under certain Department of Energy and Nuclear Regulatory Commission contracts.

Except to the extent that Department facilities or activities of the types subject to licensing pursuant to section 202 of the Energy Reorganization Act of 1974 or the Uranium Mill Tailings Radiation Control Act of 1978 are involved, any prime contractor of the Department is exempt from the requirements for a license set forth in sections 62, 63, and 64 of the Act and from the regulations in this part to the extent that such contractor, under his prime contract with the Department, receives, possesses, uses, transfers or delivers source material for: (a) The performance of work for the Department at a United States Government-owned or controlled site, including the transportation of source material to or from such site and the performance of contract services during temporary interruptions of such transportation; (b) research in, or development, manufacture, storage, testing or transportation of, atomic weapons or components thereof; or (c) the use or operation of nuclear reactors or other nuclear devices in a United States Government-owned vehicle or vessel. In addition to the foregoing exemptions, and subject to the requirement for licensing of Department facilities and activities pursuant to section 202 of the Energy Reorganization Act of 1974 or the Uranium Mill Tailings Radiation Control Act of 1980, any prime contractor or subcontractor of the Department or the Commission is exempt from the requirements for a license set forth in sections 62, 63, and 64 of the Act and from the regulations in this part to the extent that such prime contractor or subcontractor receives, possesses, uses, transfers or delivers source material under his prime contract or subcontract when the Commission determines that the exemption of the prime contractor or subcontractor is authorized by law; and that, under the terms of the contract or subcontract, there is adequate assurance that the work thereunder can be accomplished without undue risk to the public health and safety.

[40 FR 8787, Mar. 3, 1975, as amended at 43 FR 6923, Feb. 17, 1978; 45 FR 65531, Oct. 3, 1980]

§ 40.12 Carriers.

(a) Except as specified in paragraph (b) of this section, common and contract carriers, freight forwarders, warehousemen, and the U.S. Postal Service are exempt from the regulations in this part and the requirements for a license set forth in section 62 of the Act to the extent that they transport or store source material in the regular course of the carriage for another or storage incident thereto.

(b) The exemption in paragraph (a) of this section does not apply to a person who possesses a transient shipment (as defined in § 40.4(r)), an import shipment, or an export shipment of natural uranium in an amount exceeding 500 kilograms, unless the shipment is in the form of ore or ore residue.

[52 FR 9651, Mar. 26, 1987]

§ 40.13 Unimportant quantities of source material.

(a) Any person is exempt from the regulations in this part and from the requirements for a license set forth in section 62 of the Act to the extent that such person receives, possesses, uses, transfers or delivers source material in any chemical mixture, compound, solution, or alloy in which the source material is by weight less than one-twentieth of 1 percent (0.05 percent) of the mixture, compound, solution or alloy. The exemption contained in this paragraph does not include byproduct material as defined in this part.

(b) Any person is exempt from the regulations in this part and from the requirements for a license set forth in section 62 of the act to the extent that such person receives, possesses, uses, or transfers unrefined and unprocessed ore containing source material; provided, that, except as authorized in a specific license, such person shall not refine or process such ore.

(c) Any person is exempt from the regulation in this part and from the requirements for a license set forth in section 62 of the Act to the extent that such person receives, possesses, uses, or transfers:

(1) Any quantities of thorium contained in (i) incandescent gas mantles, (ii) vacuum tubes, (iii) welding rods, (iv) electric lamps for illuminating purposes: *Provided*, That each lamp does not contain more than 50 milligrams of thorium, (v) germicidal lamps, sunlamps, and lamps for outdoor or industrial lighting: *Provided*, That each lamp does not contain more than 2 grams of thorium, (vi) rare earth metals and compounds, mixtures, and products containing not more than 0.25 percent by weight thorium, uranium, or any combination of these, or (vii) personnel neutron dosimeters: *Provided*, That each dosimeter does not contain more than 50 milligrams of thorium.

(2) Source material contained in the following products:

(i) Glazed ceramic tableware, provided that the glaze contains not more than 20 percent by weight source material;

(ii) Piezoelectric ceramic containing not more than 2 percent by weight source material;

(iii) Glassware containing not more than 10 percent by weight source material; but not including commercially manufactured glass brick, pane glass, ceramic tile, or other glass or ceramic used in construction;

(iv) Glass enamel or glass enamel frit containing not more than 10 percent by weight source material imported or ordered for importation into the United States, or initially distributed by manufacturers in the United States, before July 25, 1983.[1]

(3) Photographic film, negatives, and prints containing uranium or thorium;

(4) Any finished product or part fabricated of, or containing tungsten or magnesium-thorium alloys, provided that the thorium content of the alloy does not exceed 4 percent by weight and that the exemption contained in this subparagraph shall not be deemed to authorize the chemical, physical or metallurgical treatment or processing of any such product or part; and

(5) Uranium contained in counterweights installed in aircraft, rockets, projectiles, and missiles, or stored or handled in connection with installation or removal of such counterweights: *Provided*, That:

(i) The counterweights are manufactured in accordance with a specific license issued by the Commission or the Atomic Energy Commission authorizing distribution by the licensee pursuant to this paragraph;

(ii) Each counterweight has been impressed with the following legend clearly legible through any plating or other covering: "Depleted Uranium";[2]

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[1] On July 25, 1983, the exemption of glass enamel or glass enamel frit was suspended. The exemption was eliminated on September 11, 1984.

[2] The requirements specified in paragraphs (c)(5) (ii) and (iii) of this section need not be met by counterweights manufactured prior to Dec. 31, 1969: *Provided*, That such counterweights were manufac-

Continued

(iii) Each counterweight is durably and legibly labeled or marked with the identification of the manufacturer, and the statement: "Unauthorized Alterations Prohibited";[2] and

(iv) The exemption contained in this paragraph shall not be deemed to authorize the chemical, physical, or metallurgical treatment or processing of any such counterweights other than repair or restoration of any plating or other covering.

(6) Natural or depleted uranium metal used as shielding constituting part of any shipping container: *Provided*, That:

(i) The shipping container is conspicuously and legibly impressed with the legend "CAUTION—RADIOACTIVE SHIELDING—URANIUM"; and

(ii) The uranium metal is encased in mild steel or equally fire resistant metal of minimum wall thickness of one-eighth inch (3.2 mm).

(7) Thorium contained in finished optical lenses, provided that each lens does not contain more than 30 percent by weight of thorium; and that the exemption contained in this subparagraph shall not be deemed to authorize either:

(i) The shaping, grinding or polishing of such lens or manufacturing processes other than the assembly of such lens into optical systems and devices without any alteration of the lens; or

(ii) The receipt, possession, use, transfer, or of thorium contained in contact lenses, or in spectacles, or in eyepieces in binoculars or other optical instruments.

(8) Thorium contained in any finished aircraft engine part containing nickel-thoria alloy, *Provided*, That:

(i) The thorium is dispersed in the nickel-thoria alloy in the form of finely divided thoria (thorium dioxide); and

(ii) The thorium content in the nickel-thoria alloy does not exceed 4 percent by weight.

(9) The exemptions in this paragraph (c) do not authorize the manufacture of any of the products described.

(d) Any person is exempt from the regulations in this part and from the requirements for a license set forth in section 62 of the Act to the extent that such person receives, possesses, uses, or transfers uranium contained in detector heads for use in fire detection units, provided that each detector head contains not more than 0.005 microcurie of uranium. The exemption in this paragraph does not authorize the manufacture of any detector head containing uranium.

[26 FR 284, Jan. 14, 1961, as amended at 26 FR 10929, Nov. 22, 1961; 28 FR 8021, Aug. 7, 1963; 28 FR 14309, Dec. 27, 1963; 30 FR 15802, Dec. 22, 1965; 32 FR 15873, Nov. 18, 1967; 34 FR 14067, Sept. 5, 1969; 34 FR 19546, Dec. 11, 1969; 35 FR 6313, Apr. 18, 1970]

EDITORIAL NOTE: For additional FEDERAL REGISTER citations affecting § 40.11, see the Finding Aids section of this volume.

§ 40.14 Specific exemptions.

(a) The Commission may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of the regulation in this part as it determines are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest.

(b) [Reserved]

(c) The DOE is exempt from the requirements of this part to the extent that its activities are subject to the requirements of Part 60 of this chapter.

(d) Except as specifically provided in Part 61 of this chapter any licensee is exempt from the requirements of this part to the extent that its activities are subject to the requirements of Part 61 of this chapter.

[37 FR 5747, Mar. 21, 1972, as amended at 39 FR 26279, July 18, 1974; 40 FR 8787, Mar. 3, 1975; 45 FR 65531, Oct. 3, 1980; 46 FR 13979, Feb. 25, 1981; 47 FR 57481, Dec. 27, 1982]

GENERAL LICENSES

§ 40.20 Types of licenses.

(a) Licenses for source material and byproduct material are of two types: general and specific. Licenses for long-

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tured under a specific license issued by the Atomic Energy Commission and were impressed with the legend required by § 40.13(c)(5)(ii) in effect on June 30, 1969.

erm care and custody of residual ra-
lioactive material at disposal sites are
eneral licenses. The general licenses
rovided in this part are effective
vithout the filing of applications with
he Commission or the issuance of li-
ensing documents to particular per-
ons. Specific licenses are issued to
amed persons upon applications filed
ursuant to the regulations in this
art.

(b) Section 40.27 contains a general
icense applicable for custody and
ong-term care of residual radioactive
naterial at uranium mill tailings dis-
osal sites remediated under Title I of
he Uranium Mill Tailings Radiation
Control Act of 1978, as amended.

(c) Section 40.28 contains a general
icense applicable for custody and
ong-term care of byproduct material
t uranium or thorium mill tailings
lisposal sites under Title II of the
Jranium Mill Tailings Radiation Con-
rol Act of 1978, as amended.

55 FR 45598, Oct. 30, 1990]

40.21 General license to receive title to source or byproduct material.

A general license is hereby issued au-
horizing the receipt of title to source
r byproduct material, as defined in
his part, without regard to quantity.
This general license does not author-
ze any person to receive, possess, de-
iver, use, or transfer source or byprod-
ct material.

45 FR 65531, Oct. 3, 1980]

40.22 Small quantities of source material.

(a) A general license is hereby issued
uthorizing commercial and industrial
irms, research, educational and medi-
al institutions and Federal, State and
ocal government agencies to use and
ransfer not more than fifteen (15)
ounds of source material at any one
ime for research, development, educa-
ional, commercial or operational pur-
oses. A person authorized to use or
ransfer source material, pursuant to
this general license, may not receive
more than a total of 150 pounds of
ource material in any one calendar
year.

(b) Persons who receive, possess, use,
or transfer source material pursuant to the general license issued in paragraph (a) of this section are exempt from the provisions of Parts 19, 20, and 21, of this chapter to the extent that such receipt, possession, use or transfer are within the terms of such general license: *Provided, however,* That this exemption shall not be deemed to apply to any such person who is also in possession of source material under a specific license issued pursuant to this part.

(c) Persons who receive, possess, use or transfer source material pursuant to the general license in paragraph (a) of this section are prohibited from administering source material, or the radiation therefrom, either externally or internally, to human beings except as may be authorized by NRC in a specific license.

[26 FR 284, Jan. 14, 1961, as amended at 38 FR 22221, Aug. 17, 1973; 42 FR 28896, June 6, 1977; 45 FR 55420, Aug. 20, 1980]

§ 40.23 General license for carriers of transient shipments of natural uranium other than in the form of ore or ore residue.

(a) A general license is hereby issued to any person to possess a transient shipment of natural uranium, other than in the form of ore or ore residue, in amounts exceeding 500 kilograms.

(b)(1) Persons generally licensed under paragraph (a) of this section, who plan to carry a transient shipment with scheduled stops at a United States port, shall notify the Division of Safeguards and Transportation, U.S. Nuclear Regulatory Commission, Washington, DC 20555. The notification must be in writing and must be received at least 10 days before transport of the shipment commences at the shipping facility.

(2) The notification must include the following information:

(i) Location of all scheduled stops in United States territory;

(ii) Arrival and departure times for all scheduled stops in United States territory;

(iii) The type of transport vehicle;

(iv) A physical description of the shipment;

(v) The numbers and types of containers;

(vi) The name and telephone number of the carrier's representatives at each stopover location in the United States territory;

(vii) A listing of the modes of shipments, transfer points, and routes to be used;

(viii) The estimated date and time that shipment will commence and that each nation (other than the United States) along the route is scheduled to be entered;

(ix) For shipment between countries that are not party to the Convention on the Physical Protection of Nuclear Material (i.e., not listed in Appendix F to Part 73 of this chapter), a certification that arrangements have been made to notify the Division of Safeguards and Transportation when the shipment is received at the destination facility.

(c) Persons generally licensed under this section making unscheduled stops at United States ports, immediately after the decision to make an unscheduled stop, shall provide to the Division of Safeguards and Transportation the information required under paragraph (b) of this section.

(d) A licensee who needs to amend a notification may do so by telephoning the Division of Safeguards and Transportation at 301-492-3365.

[52 FR 9651, Mar. 26, 1987, as amended at 53 FR 4110, Feb. 12, 1988]

§ 40.24 [Reserved]

§ 40.25 General license for use of certain industrial products or devices.

(a) A general license is hereby issued to receive, acquire, possess, use, or transfer, in accordance with the provisions of paragraphs (b), (c), (d), and (e) of this section, depleted uranium contained in industrial products or devices for the purpose of providing a concentrated mass in a small volume of the product or device.

(b) The general license in paragraph (a) of this section applies only to industrial products or devices which have been manufactured or initially transferred in accordance with a specific license issued pursuant to § 40.34 (a) of this part or in accordance with a specific license issued by an Agreement State which authorizes manufacture of the products or devices for distribution to persons generally licensed by the Agreement State.

(c)(1) Persons who receive, acquire, possess, or use depleted uranium pursuant to the general license established by paragraph (a) of this section shall file Form NRC 244, "Registration Certificate—Use of Depleted Uranium Under General License," with the Director, Division of Nuclear Material Safety, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555 with a copy to the appropriate NRC Regional Administrator. The form shall be submitted within 30 days after the first receipt or acquisition of such depleted uranium. The registrant shall furnish on Form NRC 244 the following information and such other information as may be required by that form:

(i) Name and address of the registrant;

(ii) A statement that the registrant has developed and will maintain procedures designed to establish physical control over the depleted uranium described in paragraph (a) of this section and designed to prevent transfer of such depleted uranium in any form, including metal scrap, to persons not authorized to receive the depleted uranium; and

(iii) Name and/or title, address, and telephone number of the individual duly authorized to act for and on behalf of the registrant in supervising the procedures identified in paragraph (c)(1)(ii) of this section.

(2) The registrant possessing or using depleted uranium under the general license established by paragraph (a) of this section shall report in writing to the Director, Division of Nuclear Material Safety, with a copy to the Regional Administrator of the appropriate U.S. Nuclear Regulatory Commission Regional Office listed in Appendix D of Part 20 of this chapter, any changes in information furnished by him in the Form NRC 244 "Registration Certificate—Use of Depleted Uranium Under General License." The report shall be submitted within 30 days after the effective date of such change.

(d) A person who receives, acquires, possesses, or uses depleted uranium pursuant to the general license established by paragraph (a) of this section:

(1) Shall not introduce such depleted uranium, in any form, into a chemical, physical, or metallurgical treatment or process, except a treatment or process for repair or restoration of any plating or other covering of the depleted uranium.

(2) Shall not abandon such depleted uranium.

(3) Shall transfer or dispose of such depleted uranium only by transfer in accordance with the provisions of § 40.51 of this part. In the case where the transferee receives the depleted uranium pursuant to the general license established by paragraph (a) of this section, the transferor shall furnish the transferee a copy of this section and a copy of Form NRC 244. In the case where the transferee receives the depleted uranium pursuant to a general license contained in an Agreement State's regulation equivalent to this section, the transferor shall furnish the transferee a copy of this section and a copy of Form NRC 244 accompanied by a note explaining that use of the product or device is regulated by the Agreement State under requirements substantially the same as those in this section.

(4) Within 30 days of any transfer, shall report in writing to the Director, Division of Nuclear Material Safety, with a copy to the Regional Administrator of the appropriate U.S. Nuclear Regulatory Commission Regional Office listed in Appendix D of Part 20 of this chapter, the name and address of the person receiving the source material pursuant to such transfer.

(e) Any person receiving, acquiring, possessing, using, or transferring depleted uranium pursuant to the general license established by paragraph (a) of this section is exempt from the requirements of Parts 19, 20 and 21 of this chapter with respect to the depleted uranium covered by that general license.

[41 FR 53331, Dec. 6, 1976, as amended at 42 FR 28896, June 6, 1977; 43 FR 6923, Feb. 17, 1978; 43 FR 52202, Nov. 9, 1978; 52 FR 31611, Aug. 21, 1987]

§ 40.26 General license for possession and storage of byproduct material as defined in this part.

(a) A general license is hereby issued to receive title to, own, or possess byproduct material as defined in this part without regard to form or quantity.

(b) The general license in paragraph (a) of this section applies only: In the case of licensees of the Commission, where activities that result in the production of byproduct material are authorized under a specific license issued by the Commission pursuant to this part, to byproduct material possessed or stored at an authorized disposal containment area or transported incident to such authorized activity: *Provided*, That authority to receive title to, own, or possess byproduct material under this general license shall terminate when the specific license for source material expires, is renewed, or is amended to include a specific license for byproduct material as defined in this part.

(c) The general license in paragraph (a) of this section is subject to:

(1) The provisions of Parts 19, 20, 21, and §§ 40.1, 40.2, 40.2a, 40.3, 40.4, 40.5, 40.6, 40.41, 40.46, 40.61, 40.62, 40.63, 40.65, 40.71, and 40.81 of Part 40 of this chapter; and

(2) The documentation of daily inspections of tailings or waste retention systems and the immediate notification of the appropriate NRC regional office as indicated in Appendix D to 10 CFR Part 20 of this chapter, or the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, of any failure in a tailings or waste retention system that results in a release of tailings or waste into unrestricted areas, or of any unusual conditions (conditions not contemplated in the design of the retention system) that if not corrected could lead to failure of the system and result in a release of tailings or waste into unrestricted areas; and any additional requirements the Commission may by order deem necessary. The licensee shall retain this documentation of each daily inspection as a record for

three years after each inspection is documented.

(d) The general license in paragraph (a) of this section shall expire nine months from the effective date of this subparagraph unless an applicable licensee has submitted, pursuant to the provisions of § 40.31 of this part, an application for license renewal or amendment which includes a detailed program for meeting the technical and financial criteria contained in Appendix A of this part.

[44 FR 50014, Aug. 24, 1979, as amended at 45 FR 12377, Feb. 26, 1980; 45 FR 65531, Oct. 3, 1980; 53 FR 19248, May 27, 1988]

§ 40.27 General license for custody and long-term care of residual radioactive material disposal sites.

(a) A general license is issued for the custody of and long-term care, including monitoring, maintenance, and emergency measures necessary to protect public health and safety and other actions necessary to comply with the standards promulgated under section 275(a) of the Atomic Energy Act of 1954, as amended, for disposal sites under Title I of the Uranium Mill Tailings Radiation Control Act of 1978, as amended. The license is available only to the Department of Energy, or another Federal agency designated by the President to provide long-term care. The purpose of this general license is to ensure that uranium mill tailings disposal sites will be cared for in such a manner as to protect the public health, safety, and the environment after remedial action has been completed.

(b) The general license in paragraph (a) of this section becomes effective when the Commission accepts a site Long-Term Surveillance Plan (LTSP) that meets the requirements of this section, and when the Commission concurs with the Department of Energy's determination of completion of remedial action at each disposal site. There is no termination of this general license. The LTSP may incorporate by reference information contained in documents previously submitted to the Commission if the references to the individual incorporated documents are clear and specific. Each LTSP must include--

(1) A legal description of the disposal site to be licensed, including documentation on whether land and interests are owned by the United States or an Indian tribe. If the site is on Indian land, then, as specified in the Uranium Mill Tailings Radiation Control Act of 1978, as amended, the Indian tribe and any person holding any interest in the land shall execute a waiver releasing the United States of any liability or claim by the Tribe or person concerning or arising from the remedial action and holding the United States harmless against any claim arising out of the performance of the remedial action;

(2) A detailed description, which can be in the form of a reference of the final disposal site conditions, including existing ground water characterization and any necessary ground water protection activities or strategies. This description must be detailed enough so that future inspectors will have a baseline to determine changes to the site and when these changes are serious enough to require maintenance or repairs. If the disposal site has continuing aquifer restoration requirements, then the licensing process will be completed in two steps. The first step includes all items other than ground water restoration. Ground water monitoring, which would be addressed in the LTSP, may still be required in this first step to assess performance of the tailings disposal units. When the Commission concurs with the completion of ground water restoration, the licensee shall assess the need to modify the LTSP and report results to the Commission. If the proposed modifications meet the requirements of this section, the LTSP will be considered suitable to accommodate the second step.

(3) A description of the long-term surveillance program, including proposed inspection frequency and reporting to the Commission (as specified in Appendix A, criterion 12 of this part), frequency and extent of ground water monitoring if required, appropriate constituent concentration limits for ground water, inspection personnel qualifications, inspection procedures, recordkeeping and quality assurance procedures;

(4) The criteria for follow-up inspections in response to observations from routine inspections or extreme natural events; and

(5) The criteria for instituting maintenance or emergency measures.

(c) The long-term care agency under the general license established by paragraph (a) of this section shall --

(1) Implement the LTSP as described in paragraph (b) of this section;

(2) Care for the disposal site in accordance with the provisions of the LTSP;

(3) Notify the Commission of any changes to the LTSP; the changes may not conflict with the requirements of this section;

(4) Guarantee permanent right-of-entry to Commission representatives for the purpose of periodic site inspections; and

(5) Notify the Commission prior to undertaking any significant construction, actions, or repairs related to the disposal site, even if the action is required by a State or another Federal agency.

(d) As specified in the Uranium Mill Tailings Radiation Control Act of 1978, as amended, the Secretary of the Interior, with the concurrence of the Secretary of Energy and the Commission, may sell or lease any subsurface mineral rights associated with land on which residual radioactive materials are disposed. In such cases, the Commission shall grant a license permitting use of the land if it finds that the use will not disturb the residual radioactive materials or that the residual radioactive materials will be restored to a safe and environmentally sound condition if they are disturbed by the use.

(e) The general license in paragraph (a) of this section is exempt from parts 19, 20, and 21 of this chapter, unless significant construction, actions, or repairs are required. If these types of actions are to be undertaken, the licensee shall explain to the Commission which requirements from these parts apply for the actions and comply with the appropriate requirements.

[55 FR 45598, Oct. 30, 1990]

§ 40.28 General license for custody and long-term care of uranium or thorium byproduct materials disposal sites.

(a) A general license is issued for the custody of and long-term care, including monitoring, maintenance, and emergency measures necessary to protect the public health and safety and other actions necessary to comply with the standards in this part for uranium or thorium mill tailings sites closed under Title II of the Uranium Mill Tailings Radiation Control Act of 1978, as amended. The licensee will be the Department of Energy, another Federal agency designated by the President, or a State where the disposal site is located. The purpose of this general license is to ensure that uranium and thorium mill tailings disposal sites will be cared for in such a manner as to protect the public health, safety, and the environment after closure.

(b) The general license in paragraph (a) of this section becomes effective when the Commission terminates, or concurs in an Agreement State's termination of, the current specific license and a site Long-Term Surveillance Plan (LTSP) meeting the requirements of this section has been accepted by the Commission. There is no termination of this general license. If the LTSP has not been formally received by the NRC prior to termination of the current specific license, the Commission may issue a specific order to the intended custodial agency to ensure continued control and surveillance of the disposal site to protect the public health, safety, and the environment. The Commission will not unnecessarily delay the termination of the specific license solely on the basis that an acceptable LTSP has not been received. The LTSP may incorporate by reference information contained in documents previously submitted to the Commission if the references to the individual incorporated documents are clear and specific. Each LTSP must include--

(1) A legal description of the disposal site to be transferred (unless transfer is exempted under provisions of the Atomic Energy Act, § 83(b)(1)(A)) and licensed;

(2) A detailed description, which can be in the form of a reference of the final disposal site conditions, including existing ground water characterization. This description must be detailed enough so that future inspectors will have a baseline to determine changes to the site and when these changes are serious enough to require maintenance or repairs;

(3) A description of the long-term surveillance program, including proposed inspection frequency and reporting to the Commission (as specified in appendix A, Criterion 12 of this part), frequency and extent of ground water monitoring, if required, appropriate constituent concentration limits for ground water, inspection personnel qualifications, inspection procedures, recordkeeping and quality assurance procedures;

(4) The criteria for follow-up inspections in response to observations from routine inspections or extreme natural events; and

(5) The criteria for instituting maintenance or emergency measures.

(c) The long-term care agency who has a general license established by paragraph (a) of this section shall—

(1) Implement the LTSP as described in paragraph (b) of this section;

(2) Care for the disposal site in accordance with the provisions of the LTSP;

(3) Notify the Commission of any changes to the LTSP; the changes may not conflict with the requirements of this section;

(4) Guarantee permanent right-of-entry to Commission representatives for the purpose of periodic site inspections; and

(5) Notify the Commission prior to undertaking any significant construction, actions, or repairs related to the disposal site, even if the action is required by a State or another Federal agency.

(d) Upon application, the Commission may issue a specific license, as specified in the Uranium Mill Tailings Radiation Control Act of 1978, as amended, permitting the use of [illegible] ceived from any person. If permission is granted, the person who transferred the land to DOE or the State shall receive the right of first refusal with respect to this use of the land. The application must demonstrate that—

(1) The proposed action does not endanger the public health, safety, welfare, or the environment;

(2) Whether the proposed action is of a temporary or permanent nature, the site would be maintained and/or restored to meet requirements in Appendix A of this part for closed sites; and

(3) Adequate financial arrangements are in place to ensure that the byproduct materials are not disturbed, or if disturbed, that the applicant is able to restore the site to a safe and environmentally sound condition.

(e) The general license in paragraph (a) of this section is exempt from parts 19, 20, and 21 of this Chapter, unless significant construction, actions, or repairs are required. If these types of actions are to be undertaken, the licensee shall explain to the Commission which requirements from these parts apply for the actions and comply with the appropriate requirements.

(f) In cases where the Commission determines that transfer of title of land used for disposal of any byproduct materials to the United States or any appropriate State is not necessary to protect the public health, safety or welfare or to minimize or eliminate danger to life or property (Atomic Energy Act, § 83(b)(1)(A)), the Commission will consider specific modifications of the custodial agency's LTSP provisions on a case-by-case basis.

[55 FR 45599, Oct. 30, 1990]

LICENSE APPLICATIONS

§ 40.31 Application for specific licenses.

(a) A person may file an application for specific license in duplicate on NRC Form 313, "Application for Material License," in accordance with the instructions in § 40.5 of this chapter. Information contained in previous applications, statements or reports filed with the Commission may be incorporated by reference, provided that the reference is clear and specific.

(b) The Commission may at any time after the filing of the original application, and before the expiration of the license, require further statements in order to enable the Commission to determine whether the application should be granted or denied or whether a license should be modified or revoked. All applications and statements shall be signed by the applicant or licensee or a person duly authorized to act for and on his behalf.

(c) Applications and documents submitted to the Commission in connection with applications will be made available for public inspection in accordance with the provisions of the regulations contained in Parts 2 and 9 of this chapter.

(d) An application for a license filed pursuant to the regulations in this part will be considered also as an application for licenses authorizing other activities for which licenses are required by the Act: *Provided,* That the application specifies the additional activities for which licenses are requested and complies with regulations of the Commission as to applications for such licenses.

(e) Each application for a source material license, other than a license exempted from Part 170 of this chapter, shall be accompanied by the fee prescribed in § 170.31 of this chapter. No fee will be required to accompany an application for renewal or amendment of a license, except as provided in § 170.31 of this chapter.

(f) An application for a license to possess and use source material for uranium milling, production of uranium hexafluoride, or for the conduct of any other activity which the Commission has determined pursuant to Subpart A of Part 51 of this chapter will significantly affect the quality of the environment shall be filed at least 9 months prior to commencement of construction of the plant or facility in which the activity will be conducted and shall be accompanied by any Environmental Report required pursuant to Subpart A of Part 51 of this chapter.

(g) In response to a written request by the Commission, any applicant for a license to possess and use source material in a uranium hexafluoride production plant or a fuel fabrication plant and any other applicant for a license to possess and use more than one effective kilogram of source material (except for ore processing, as defined in § 75.4(o) of this chapter) shall file with the Commission the installation information described in § 75.11 of this chapter, on Form N-71. The applicant shall also permit verification of this installation information by the International Atomic Energy Agency and take other action as may be necessary to implement the US/IAEA Safeguards Agreement, in the manner set forth in § 75.6 and §§ 75.11 through 75.14 of this chapter.

(h) An application for a license to receive, possess, and use source material for uranium or thorium milling or byproduct material, as defined in this part, at sites formerly associated with such milling shall contain proposed written specifications relating to milling operations and the disposition of the byproduct material to achieve the requirements and objectives set forth in Appendix A of this part. Each application must clearly demonstrate how the requirements and objectives set forth in Appendix A of this part have been addressed. Failure to clearly demonstrate how the requirements and objectives in Appendix A have been addressed shall be grounds for refusing to accept an application.

(i) As provided by § 40.36, certain applications for specific licenses filed under this part must contain a proposed decommissioning funding plan or a certification of financial assurance for decommissioning. In the case of renewal applications submitted before July 27, 1990, this submittal may follow the renewal application but must be submitted on or before July 27, 1990.

(j)(1) Each application to possess uranium hexafluoride in excess of 50 kilograms in a single container or 1000 kilograms total must contain either:

(i) An evaluation showing that the maximum intake of uranium by a member of the public due to a release would not exceed 2 milligrams, or

(ii) An emergency plan for responding to the radiological hazards of an accidental release of source mate-

and to any associated chemical hazards directly incident thereto.

(2) One or more of the following factors may be used to support an evaluation submitted under paragraph (j)(1)(i) of this section:

(i) All or part of the radioactive material is not subject to release during an accident because of the way it is stored or packaged;

(ii) Facility design or engineered safety features in the facility would reduce the amount of the release; or

(iii) Other factors appropriate for the specific facility.

(3) An emergency plan submitted under paragraph (j)(1)(ii) of this section must include the following:

(i) *Facility description.* A brief description of the licensee's facility and area near the site.

(ii) *Types of accidents.* An identification of each type of accident for which protective actions may be needed.

(iii) *Classification of accidents.* A classification system for classifying accidents as alerts or site area emergencies.

(iv) *Detection of accidents.* Identification of the means of detecting each type of radioactive materials accident in a timely manner.

(v) *Mitigation of consequences.* A brief description of the means and equipment for mitigating the consequences of each type of accident, including those provided to protect workers onsite, and a description of the program for maintaining the equipment.

(iv) *Assessment of releases.* A brief description of the methods and equipment to assess releases of radioactive materials.

(vii) *Responsibilities.* A brief description of the responsibilities of licensee personnel should an accident occur, including identification of personnel responsible for promptly notifying offsite response organizations and the NRC; also responsibilities for developing, maintaining, and updating the plan.

(viii) *Notification and coordination.* A commitment to and a brief description of the means to promptly notify offsite response organizations and request offsite assistance, including medical assistance for the treatment of contaminated injured onsite workers when appropriate. A control point must be established. The notification and coordination must be planned so that unavailability of some personnel, parts of the facility, and some equipment will not prevent the notification and coordination. The licensee shall also commit to notify the NRC operations center immediately after notification of the offsite response organizations and not later than one hour after the licensee declares an emergency.[1]

(ix) *Information to be communicated.* A brief description of the types of information on facility status, radioactive releases, and recommended protective actions, if necessary, to be given to offsite response organizations and to the NRC.

(x) *Training.* A brief description of the frequency, performance objectives and plans for the training that the licensee will provide workers on how to respond to an emergency including any special instructions and orientation tours the licensee would offer to fire, police, medical and other emergency personnel. The training shall familiarize personnel with site-specific emergency procedures. Also, the training shall thoroughly prepare site personnel for their responsibilities in the event of accident scenarios postulated as most probable for the specific site, including the use of team training for such scenarios.

(xi) *Safe shutdown.* A brief description of the means of restoring the facility to a safe condition after an accident.

(xii) *Exercises.* Provisions for conducting quarterly communications checks with offsite response organizations and biennial onsite exercises to test response to simulated emergencies. Quarterly communications checks with offsite response organizations must include the check and update of all necessary telephone numbers. The licensee shall invite offsite response organizations to participate in the biennial exercises. Participation of offsite response organizations in biennial exercises although recommended is not required. Exercises must use accident scenarios postulated as most probable for the specific site and the scenarios shall not be known to most exercise participants. The licensee shall critique each exercise using individuals not having direct implementation responsibility for the plan. Critiques of exercises must evaluate the appropriateness of the plan, emergency procedures, facilities, equipment, training of personnel, and overall effectiveness of the response. Deficiencies found by the critiques must be corrected.

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[1] These reporting requirements do not supersede or release licensees of complying with the requirements under the Emergency Planning and Community Right-to-Know Act of 1986, Title III, Pub. L. 99-499 or other state or federal reporting requirements.

(xiv) *Hazardous chemicals*. A certification that the applicant has met its responsibilities under the Emergency Planning and Community Right-to-Know Act of 1986, Title III, Pub. L. 99-499, if applicable to the applicant's activities at the proposed place of the use of the source material.

(4) The licensee shall allow the offsite response organizations expected to respond in case of an accident 60 days to comment on the licensee's emergency plan before submitting it to the NRC. The licensee shall provide any comments received within the 60 days to the NRC with the emergency plan.

[26 FR 284, Jan. 14, 1961, as amended at 31 FR 4669, Mar. 19, 1966; 34 FR 19546, Dec. 11, 1969; 36 FR 145, Jan. 6, 1971; 37 FR 5748, Mar. 21, 1972; 46 FR 13497, Feb. 23, 1981; 49 FR 9403, Mar. 12, 1984; 49 FR 19626, May 9, 1984; 49 FR 21699, May 23, 1984; 49 FR 27924, July 6, 1984; 53 FR 24047, June 27, 1988; 54 FR 14061, Apr. 7, 1989]

§ 40.32 General requirements for issuance of specific licenses.

An application for a specific license will be approved if:

(a) The application is for a purpose authorized by the Act; and

(b) The applicant is qualified by reason of training and experience to use the source material for the purpose requested in such manner as to protect health and minimize danger to life or property; and

(c) The applicant's proposed equipment, facilities and procedures are adequate to protect health and minimize danger to life or property; and

(d) The issuance of the license will not be inimical to the common defense and security or to the health and safety of the public; and

(e) In the case of an application for a license to possess and use source and byproduct material for uranium milling, production of uranium hexafluoride, or for the conduct of any other activity which the Commission determines will significantly affect the quality of the environment, the Director of Nuclear Material Safety and Safeguards or his designee, before commencement of construction of the plant or facility in which the activity will be conducted, on the basis of information filed and evaluations made pursuant to Subpart A of Part 51 of this chapter, has concluded, after weighing the environmental, economic, technical and other benefits against environmental costs and considering available alternatives, that the action called for is the issuance of the proposed license, with any appropriate conditions to protect environmental values. Commencement of construction prior to such a conclusion shall be grounds for denial of a license to possess and use source and byproduct material in such plant or facility. As used in this paragraph the term "commencement of construction" means any clearing of land, excavation, or other substantial action that would adversely affect the environment of a site. The term does not mean site exploration, necessary roads for site exploration, borings to determine foundation conditions, or other preconstruction monitoring or testing to establish background information related to the suitability of the site or the protection of environmental values.

(f) The applicant satisfies any applicable special requirements contained in § 40.34.

[26 FR 284, Jan. 14, 1961, as amended at 36 FR 145, Jan. 6, 1971; 37 FR 5748, Mar. 21, 1972; 39 FR 26279, July 18, 1974; 41 FR 53329, Dec. 6, 1976; 43 FR 6924, Feb. 17, 1978; 49 FR 9403, Mar. 12, 1984]

§ 40.34 Special requirements for issuance of specific licenses.

(a) An application for a specific license to manufacture industrial products and devices containing depleted uranium, or to initially transfer such products or devices, for use pursuant to § 40.25 of this part or equivalent regulations of an Agreement State, will be approved if:

(1) The applicant satisfies the general requirements specified in § 40.32;

(2) The applicant submits sufficient information relating to the design, manufacture, prototype testing, quality control procedures, labeling or marking, proposed uses, and potential hazards of the industrial product or device to provide reasonable assurance that possession, use, or transfer of the depleted uranium in the product or device is not likely to cause any individual to receive in any period of one calendar quarter a radiation dose in excess of 10 percent of the limits specified in § 20.101(a) of this chapter; and

(3) The applicant submits sufficient information regarding the industrial product or device and the presence of depleted uranium for a mass-volume application in the product or device to provide reasonable assurance that unique benefits will accrue to the public because of the usefulness of the product or device.

(b) In the case of an industrial product or device whose unique benefits are questionable, the Commission will approve an application for a specific license under this paragraph only if the product or device is found to combine a high degree of utility and low probability of uncontrolled disposal and dispersal of significant quantities of depleted uranium into the environment.

(c) The Commission may deny an applicant for a specific license under this paragraph if the end uses of the industrial product or device cannot be reasonably foreseen.

[41 FR 53332, Dec. 6, 1976, as amended at 43 FR 6924, Feb. 17, 1978]

§ 40.35 Conditions of specific licenses issued pursuant to § 40.34.

Each person licensed pursuant to § 40.34 shall:

(a) Maintain the level of quality control required by the license in the manufacture of the industrial product or device, and in the installation of the depleted uranium into the product or device;

(b) Label or mark each unit to: (1) Identify the manufacturer or initial transferor of the product or device and the number of the license under which the product or device was manufactured or initially transferred, the fact that the product or device contains depleted uranium, and the quantity of depleted uranium in each product or device; and (2) state that the receipt, possession, use, and transfer of the product or device are subject to a general license or the equivalent and the regulations of the U.S. NRC or of an Agreement State;

(c) Assure that the depleted uranium before being installed in each product or device has been impressed with the following legend clearly legible through any plating or other covering: "Depleted Uranium";

(d)(1) Furnish a copy of the general license contained in § 40.25 and a copy of Form NRC 244 to each person to whom he transfers source material in a product or device for use pursuant to the general license contained in § 40.25; or

(2) Furnish a copy of the general license contained in the Agreement State's regulation equivalent to § 40.25 and a copy of the Agreement State's certificate, or alternately, furnish a copy of the general license contained in § 40.25 and a copy of Form NRC 244 to each person to whom he transfers source material in a product or device for use pursuant to the general license of an Agreement State. If a copy of the general license in § 40.25 and a copy of Form NRC 244 are furnished to such person, they shall be accompanied by a note explaining that use of the product or device is regulated by the Agreement State under requirements substantially the same as those in § 40.25; and

(e)(1) Report to the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, all transfers of industrial products or devices to persons for use under the general license in § 40.25. Such report shall identify each general licensee by name and address, an individual by name and/or position who may constitute a point of contact between the Commission and the general licensee, the type and model number of device transferred, and the quantity of depleted uranium contained in the product or device. The report shall be submitted within 30 days after the end of each calendar quarter in which such a product or device is transferred to the generally licensed person. If no transfers have been made to persons generally licensed under § 40.25 during the reporting period, the report shall so indicate;

(2) Report to the responsible Agreement State Agency all transfers of industrial products or devices to persons for use under the general license in the Agreement State's regulation equivalent to § 40.25. Such report shall identify each general licensee by name and address, an individual by name and/or position who may constitute a point of contact between the Agency and the general licensee, the type and model number of device transferred, and the quantity of depleted uranium contained in the product or device. The report shall be submitted within 30 days after the end of each calendar quarter in which such product or device is transferred to the generally licensed person. If no transfers have been made to a particular Agreement State during the reporting period, this information shall be reported to the responsible Agreement State Agency;

(3) Keep records showing the name, address, and a point of contact for each general license to whom he or she transfers depleted uranium in industrial products or devices for use pursuant to the general license provided in § 40.25 or equivalent regulations of an Agreement State. The records must be retained for three years from the date of transfer and must show the date of each transfer, the quantity of depleted uranium in each product or device transferred, and compliance with the report requirements of this section.

(f) Licensees required to submit emergency plans by § 40.31(i) shall follow the emergency plan approved by the Commission. The licensee may change the plan without Commission approval if the changes do not decrease the effectiveness of the plan. The licensee shall furnish the change to the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555 and to affected offsite response organizations within six months after the change is made. Proposed changes that decrease the effectiveness of the approved emergency plan may not be implemented without application to and prior approval by the Commission.

[41 FR 53332, Dec. 6, 1976, as amended at 43 FR 6924, Feb. 17, 1978; 52 FR 31611, Aug. 21, 1987; 53 FR 19248, May 27, 1988; 54 FR 14062, Apr. 7, 1989]

§ 40.36 Financial assurance and recordkeeping for decommissioning.

Except for licenses authorizing the receipt, possession, and use of source material for uranium or thorium milling, or byproduct material at sites formerly associated with such milling, for which financial assurance requirements are set forth in Appendix A of this part, criteria for providing financial assurance for decommissioning are as follows:

(a) Each applicant for a specific license authorizing the possession and use of more than 100 mCi of source material in a readily dispersible form shall submit a decommissioning funding plan as described in paragraph (d) of this section.

(b) Each applicant for a specific license authorizing possession and use of quantities of source material greater than 10 mCi but less than or equal to 100 mCi in a readily dispersible form shall either—

(1) Submit a decommissioning funding plan as described in paragraph (d) of this section; or

(2) Submit a certification that financial assurance for decommissioning has been provided in the amount of $150,000 using one of the methods described in paragraph (e) of this section. For an applicant, this certification may state that the appropriate assurance will be obtained after the application has been approved and the li-

cense issued but prior to the receipt of licensed material. As part of the certification, a copy of the financial instrument obtained to satisfy the requirements of paragraph (e) of this section is to be submitted to NRC.

(c) (1) Each holder of a specific license issued on or after July 27, 1990, which is covered by paragraph (a) or (b) of this section, shall provide financial assurance for decommissioning in accordance with the criteria set forth in this section.

(2) Each holder of a specific license issued before July 27, 1990, and covered by paragraph (a) of this section shall submit, on or before July 27, 1990, a decommissioning funding plan or certification of financial assurance for decommissioning in an amount at least equal to $750,000 in accordance with the criteria set forth in this section. If the licensee submits the certification of financial assurance rather than a decommissioning funding plan at this time, the licensee shall include a decommissioning funding plan in any application for license renewal.

(3) Each holder of a specific license issued before July 27, 1990, and covered by paragraph (b) of this section shall submit, on or before July 27, 1990, a certification of financial assurance for decommissioning or a decommissioning funding plan in accordance with the criteria set forth in this section.

(d) Each decommissioning funding plan must contain a cost estimate for decommissioning and a description of the method of assuring funds for decommissioning from paragraph (e) of this section, including means of adjusting cost estimates and associated funding levels periodically over the life of the facility.

(e) Financial assurance for decommissioning must be provided by one or more of the following methods:

(1) Prepayment. Prepayment is the deposit prior to the start of operation into an account segregated from licensee assets and outside the licensee's administrative control of cash or liquid assets such that the amount of funds would be sufficient to pay decommissioning costs. Prepayment may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities.

(2) A surety method, insurance, or other guarantee method. These methods guarantee that decommissioning costs will be paid should the licensee default. A surety method may be in the form of a surety bond, letter of credit, or line of credit. A parent company guarantee of funds for decommissioning costs based on a financial test may be used if the guarantee and test are as contained in Appendix A of 10 CFR Part 30. A parent company guarantee may not be used in combination with other financial methods to satisfy the requirements of this section. Any surety method or insurance used to provide financial assurance for decommissioning must contain the following conditions:

(i) The surety method or insurance must be open-ended or, if written for a specified term, such as five years, must be renewed automatically unless 90 days or more prior to the renewal date, the issuer notifies the Commission, the beneficiary, and the licensee of its intention not to renew. The surety method or insurance must also provide that the full face amount be paid to the beneficiary automatically prior to the expiration without proof of forfeiture if the licensee fails to provide a replacement acceptable to the Commission within 30 days after receipt of notification of cancellation.

(ii) The surety method or insurance must be payable to a trust established for decommissioning costs. The trustee and trust must be acceptable to the Commission. An acceptable trustee includes an appropriate State or Federal government agency or an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

(iii) The surety method or insurance must remain in effect until the Commission has terminated the license.

(3) An external sinking fund in which deposits are made at least annually, coupled with a surety method or insurance, the value of which may decrease by the amount being accumulated in the sinking fund. An external sinking fund is a fund established and maintained by setting aside funds peri-

odically in an account segregated from licensee assets and outside the licensee's administrative control in which the total amount of funds would be sufficient to pay decommissioning costs at the time termination of operation is expected. An external sinking fund may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities. The surety or insurance provision must be as stated in paragraph (e)(2) of this section.

(4) In the case of Federal, State, or local government licensees, a statement of intent containing a cost estimate for decommissioning or an amount based on paragraph (b) of this section, and indicating that funds for decommissioning will be obtained when necessary.

(f) Each person licensed under this part shall keep records of information important to the safe and effective decommissioning of the facility in an identified location until the license is terminated by the Commission. If records of relevant information are kept for other purposes, reference to these records and their locations may be used. Information the Commission considers important to decommissioning consists of—

(1) Records of spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site. These records may be limited to instances when contamination remains after any cleanup procedures or when there is reasonable likelihood that contaminants may have spread to inaccessible areas as in the case of possible seepage into porous materials such as concrete. These records must include any known information on identification of involved nuclides, quantities, forms, and concentrations.

(2) As-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used and/or stored, and of locations of possible inaccessible contamination such as buried pipes which may be subject to contamination. If required drawings are referenced, each relevant document need not be indexed individually. If drawings are not available, the licensee shall substitute appropriate records of available information concerning these areas and locations.

(3) Records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning, and records of the funding method used for assuring funds if either a funding plan or certification is used.

[53 FR 24047, June 27, 1988]

LICENSES

§ 40.41 Terms and conditions of licenses.

(a) Each license issued pursuant to the regulations in this part shall be subject to all the provisions of the act, now or hereafter in effect, and to all rules, regulations and orders of the Commission.

(b) Neither the license nor any right under the license shall be assigned or otherwise transferred in violation of the provisions of the Act.

(c) Each person licensed by the Commission pursuant to the regulations in this part shall confine his possession and use of source or byproduct material to the locations and purposes authorized in the license. Except as otherwise provided in the license, a license issued pursuant to the regulations in this part shall carry with it the right to receive, possess, and use source or byproduct material. Preparation for shipment and transport of source or byproduct material shall be in accordance with the provisions of Part 71 of this chapter.

(d) Each license issued pursuant to the regulations in this part shall be deemed to contain the provisions set forth in sections 183b.-d., of the Act, whether or not said provisions are expressly set forth in the license.

(e) The Commission may incorporate in any license at the time of issuance, or thereafter, by appropriate rule, regulation or order, such additional requirements and conditions with respect to the licensee's receipt, possession, use, and transfer of source or byproduct material as it deems appropriate or necessary in order to:

(1) Promote the common defense and security;

(2) Protect health or to minimize danger of life or property;

(3) Protect restricted data;

(4) Require such reports and the keeping of such records, and to provide for such inspections of activities under the license as may be necessary or appropriate to effectuate the purposes of the act and regulations thereunder.

(f)(1) Each licensee shall notify the appropriate NRC Regional Administrator, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any Chapter of Title 11 (Bankruptcy) of the United States Code by or against:

(i) The licensee;

(ii) An entity (as that term is defined in 11 U.S.C. 101(14)) controlling the licensee or listing the license or licensee as property of the estate; or

(iii) An affiliate (as that term is defined in 11 U.S.C. 101(2)) of the licensee.

(2) This notification must indicate:

(i) The bankruptcy court in which the petition for bankruptcy was filed; and

(ii) The date of the filing of the petition.

[26 FR 284, Jan. 14, 1961, as amended at 31 FR 15145, Dec. 2, 1966; 45 FR 65531, Oct. 3, 1980; 48 FR 32328, July 15, 1983; 52 FR 1295, Jan. 12, 1987]

§ 40.42 Expiration and termination of licenses.

(a) Except as provided in § 40.43(b) and paragraph (e) of this section, each specific license expires at the end of the day, in the month and year stated in the license.

(b) Each licensee shall notify the Commission promptly, in writing under § 40.5, and request termination of the license when the licensee decides to terminate all activities involving materials authorized under the license. This notification and request for termination of the license must include the reports and information specified in paragraphs (c)(1) (iv) and (v) of this section and a plan for completion of decommissioning, if required by paragraph (c)(2) of this section or by license condition.

(c)(1) If a licensee does not submit an application for license renewal under § 40.43, the licensee shall on or before the expiration date specified in the license—

(i) Terminate use of source material;

(ii) Remove radioactive contamination to the extent practicable except for those procedures covered by paragraph (c)(2)(i) of this section;

(iii) Properly dispose of source material;

(iv) Submit a completed form NRC-314, which certifies information concerning the disposition of materials; and

(v) Conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey, unless the licensee demonstrates that the premises are suitable for release for unrestricted use in some other manner. The licensee shall, as appropriate—

(A) Report levels of radiation in units of microrads per hour of beta and gamma radiation at one centimeter and gamma radiation at one meter from surfaces, and report levels of radioactivity, including alpha, in units of disintegrations per minute (or microcuries) per 100 square centimeters removable and fixed for surfaces, microcuries per milliliter for water, and picocuries per gram for solids such as soils or concrete; and

(B) Specify the survey instrument(s) used and certify that each instrument is properly calibrated and tested.

(2)(i) In addition to the information required under paragraphs (c)(1) (iv) and (v) of this section, the licensee shall submit a plan for completion of decommissioning if the procedures necessary to carry out decommissioning have not been previously approved by the NRC and could increase potential health and safety impacts to workers or to the public such as in any of the following cases:

(A) Procedures would involve techniques not applied routinely during cleanup or maintenance operations; or

(B) Workers would be entering areas not normally occupied where surface contamination and radiation levels are significantly higher than routinely encountered during operation; or

(C) Procedures could result in significantly greater airborne concentrations of radioactive materials than are present during operation; or

(D) Procedures could result in significantly greater releases of radioactive material to the environment than those associated with operation.

(ii) Procedures with potential health and safety impacts may not be carried out prior to approval of the decommissioning plan.

(iii) The proposed decommissioning plan, if required by paragraph (c)(2)(i) of this section or by license condition, must include—

(A) Description of planned decommissioning activities;

(B) Description of methods used to assure protection of workers and the environment against radiation hazards during decommissioning;

(C) A description of the planned final radiation survey; and

(D) An updated detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and plan for assuring the availability of adequate funds for completion of decommissioning.

(iv) The proposed decommissioning plan will be approved by the Commission if the information therein demonstrates that the decommissioning will be completed as soon as is reasonable and that the health and safety of workers and the public will be adequately protected.

(3) Upon approval of the decommissioning plan by the Commission, the licensee shall complete decommissioning in accordance with the approved plan. As a final step in decommissioning, the licensee shall again submit the information required in paragraph (c)(1)(v) of this section and shall certify the disposition of accumulated wastes from decommissioning.

(d) If the information submitted under paragraph (c)(1)(v) or (c)(3) of this section does not adequately demonstrate that the premises are suitable for release for unrestricted use, the Commission will inform the licensee of the appropriate further actions required for termination of license.

(e) Each specific license continues in effect, beyond the expiration date if necessary, with respect to possession of residual source material present as contamination until the Commission notifies the licensee in writing that the license is terminated. During this time, the licensee shall—

(1) Limit actions involving source material to those related to decommissioning; and

(2) Continue to control entry to restricted areas until they are suitable for release for unrestricted use and the Commission notifies the licensee in writing that the license is terminated.

(f) Specific licenses will be terminated by written notice to the licensee when the Commission determines that—

(1) Source material has been properly disposed;

(2) Reasonable effort has been made to eliminate residual radioactive contamination, if present; and

(3)(i) A radiation survey has been performed which demonstrates that the premises are suitable for release for unrestricted use; or

(ii) Other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release for unrestricted use.

[53 FR 24048, June 27, 1988]

§ 40.43 Renewal of licenses.

(a) Applications for renewal of a specific license shall be filed on Form NRC-2 in accordance with § 40.31 of this part.

(b) In any case in which a licensee, not less than thirty (30) days prior to expiration of his existing license, has filed an application in proper form for renewal or for a new license, such existing license shall not expire until the application for renewal or for a new license has been finally determined by the Commission.

[26 FR 284, Jan. 14, 1961, as amended at 49 FR 19626, May 9, 1984]

§ 40.44 Amendment of licenses at request of licensee.

Applications for amendment of a license shall be filed on Form NRC-2 in accordance with § 40.31 and shall specify the respects in which the licensee desires the license to be amended and the grounds for such amendment.

[49 FR 19627, May 9, 1984]

§ 40.45 Commission action on applications to renew or amend.

In considering an application by a licensee to renew or amend his license the Commission will apply the applicable criteria set forth in § 40.32.

[26 FR 284, Jan. 14, 1961, as amended at 43 FR 6924, Feb. 17, 1978]

§ 40.46 Inalienability of licenses.

No license issued or granted pursuant to the regulations in this part shall be transferred, assigned or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of any license to any person, unless the Commission shall after securing full information, find that the transfer is in accordance with the provisions of this act, and shall give its consent in writing.

TRANSFER OF SOURCE MATERIAL

§ 40.51 Transfer of source or byproduct material.

(a) No licensee shall transfer source or byproduct material except as authorized pursuant to this section.

(b) Except as otherwise provided in his license and subject to the provisions of paragraphs (c) and (d) of this section, any licensee may transfer source or byproduct material:

(1) To the Department of Energy

(2) To the agency in any Agreement State which regulates radioactive materials pursuant to an agreement with the Commission or the Atomic Energy Commission under section 274 of the Act;

(3) To any person exempt from the licensing requirements of the Act and regulations in this part, to the extent permitted under such exemption;

(4) To any person in an Agreement State subject to the jurisdiction of that State who has been exempted from the licensing requirements and regulations of that State, to the extent permitted under such exemptions;

(5) To any person authorized to receive such source or byproduct material under terms of a specific license or a general license or their equivalents issued by the Commission or an Agreement State;

(6) To any person abroad pursuant to an export license issued under Part 110 of this chapter; or

(7) As otherwise authorized by the commission in writing.

(c) Before transferring source or byproduct material to a specific licensee of the Commission or an Agreement State or to a general licensee who is required to register with the Commission or with an Agreement State prior to receipt of the source or byproduct material, the licensee transferring the material shall verify that the transferee's license authorizes receipt of the type, form, and quantity of source or byproduct material to be transferred.

(d) The following methods for the verification required by paragraph (c) of this section are acceptable:

(1) The transferor may have in his possession, and read, a current copy of the transferee's specific license or registration certificate;

(2) The transferor may have in his possession a written certification by the transferee that he is authorized by license or registration certificate to receive the type, form, and quantity of source or byproduct material to be transferred, specifying the license or registration certification number, issuing agency and expiration date;

(3) For emergency shipments the transferor my accept oral certification by the transferee that he is authorized by license or registration certificate to receive the type, form, and quantity of source or byproduct material to be transferred, specifying the license or registration certificate number, issuing agency and expiration date: *Provided*, That the oral certification is confirmed in writing within 10 days;

(4) The transferor may obtain other sources of information compiled by a reporting service from official records of the Commission or the licensing agency of an Agreement State as to the identity of licensees and the scope and expiration dates of licenses and registrations; or

(5) When none of the methods of verification described in paragraphs (d)(1) to (4) of this section are readily available or when a transferor desires to verify that information received by one of such methods is correct or up-to-date, the transferor may obtain and record confirmation from the Commission or the licensing agency of an Agreement State that the transferee is licensed to receive the source or byproduct material.

[45 FR 65532, Oct. 3, 1980]

RECORDS, REPORTS, AND INSPECTIONS

§ 40.61 Records.

(a) Each person who receives source or byproduct material pursuant to a license issued pursuant to the regulations in this part shall keep records showing the receipt, transfer, and disposal of this source or byproduct material as follows:

(1) The licensee shall retain each record of receipt of source or byproduct material as long as the material is possessed and for three years following transfer or disposition of the source or byproduct material.

(2) The licensee who transferred the material shall retain each record of transfer or source or byproduct material until the Commission terminates each license that authorizes the activity that is subject to the recordkeeping requirement.

(3) The licensee shall retain each record of disposal of source or byproduct material until the Commission terminates each license that authorizes the activity that is subject to the recordkeeping requirement.

(4) If source or byproduct material is combined or mixed with other licensed material and subsequently treated in a manner that makes direct correlation of a receipt record with a transfer, export, or disposition record impossible, the licensee may use evaluative techniques (such as first-in-first-out), to make the records that are required by this Part account for 100 percent of the material received.

(b) The licensee shall retain each record that is required by the regulations in this part or by license condition for the period specified by the appropriate regulation or license condition. If a retention period is not otherwise specified by regulation or license condition, each record must be maintained until the Commission terminates the license that authorizes the activity that is subject to the recordkeeping requirement.

(c)(1) Records which must be maintained pursuant to this part may be the original or reproduced copy or microform if the reproduced copy or microform is duly authenticated by authorized personnel and the microform is capable of producing a clear and legible copy after storage for the period specified by Commission regulations. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records such as letters, drawings, specifications, must include all pertinent information such as stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.

(2) If there is a conflict between the Commission's regulations in this part, license condition, or other written Commission approval or authorization pertaining to the retention period for the same type of record, the retention period specified in the regulations in this part for such records shall apply unless the Commission, pursuant to § 40.14 of this part, has granted a specific exemption from the record retention requirements specified in the regulations in this part.

[45 FR 65532, Oct. 3, 1980, as amended at 53 FR 19248, May 27, 1988]

§ 40.62 Inspections.

(a) Each licensee shall afford to the Commission at all reasonable times opportunity to inspect source or byproduct material and the premises and facilities wherein source or byproduct material is used or stored.

(b) Each licensee shall make available to the Commission for inspection, upon reasonable notice, records kept by him pursuant to the regulations in this chapter.

[45 FR 65532, Oct. 3, 1980]

§ 40.63 Tests.

Each licensee shall perform, or permit the Commission to perform, such tests as the Commission deems appropriate or necessary for the administration of the regulations in this part, including tests of:

(a) Source or byproduct material;

(b) Facilities wherein source or byproduct material is utilized or stored;

(c) Radiation detection and monitoring instruments; and

(d) Other equipment and devices used in connection with the utilization and storage of source or byproduct material.

[45 FR 65533, Oct. 3, 1980]

§ 40.64 Reports.

(a) Except as specified in paragraphs (d) and (e) of this section, each specific licensee who transfers, receives, or adjusts the inventory in any manner by 1 kilogram or more of uranium or thorium of foreign origin or who imports or exports 1 kilogram or more of uranium or thorium of any origin shall complete and distribute a Nuclear Material Transaction Report of Form DOE/NRC 741 in accordance with the printed instructions (NUREG/BR-0006) for completing the form. Copies of the form and instructions may be obtained by writing to U.S. Nuclear Regulatory Commission, Division of Safeguards and Transportation, Washington, DC 20555. Each licensee who transfers the material shall submit a completed copy of Form DOE/NRC 741 to the Commission and three copies to the receiver of the material no later than the close of business the next working day. Each licensee who receives the material shall submit a completed copy of Form DOE/NRC 741 to the Commission and to the shipper of the material within ten (10) days after the material is received. The Commission's copies of the reports must be submitted to the address specified in the printed instructions.

(b) Except as specified in paragraphs (d) and (e) of this section, each licensee authorized to possess at any one time and location more than 1,000 kilograms of uranium or thorium, or any combination of uranium or thorium, shall submit to the Commission within 30 days after September 30 of each year a statement of its foreign origin source material inventory. This statement must be submitted to the address specified in the reporting instructions (NUREG/BR-0007), and include the Reporting Identification Symbol (RIS) assigned by the Commission to the licensee. Copies of the reporting instructions may be obtained by writing to the U.S. Nuclear Regulatory Commission, Division of Safeguards and Transportation, Washington, DC 20555.

(c) Except as specified in paragraph (d) of this section, each licensee who is authorized to possess uranium or thorium pursuant to a specific license shall report promptly to the appropriate NRC Regional Office listed in Appendix D of Part 20 of this chapter by telephone and telegraph, mailgram, or facsimile any incident in which an attempt has been made or is believed to have been made to commit a theft or unlawful diversion of more than 15 pounds of such material at any one time or more than 150 pounds of such material in any one calendar year. The initial report shall be followed within a period of fifteen (15) days by a written report submitted to the appropriate NRC Regional Office which sets forth the details of the incident and its consequences. A copy of such written report shall be sent to the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Subsequent to the submission of the written report required by this paragraph, the licensee shall promptly inform the Director, Office of Nuclear Material Safety and Safeguards by means of a written report of any substantive additional information, which becomes available to the licensee, concerning an attempted or apparent theft or unlawful diversion of source material.

(d) The reports described in paragraphs (a), (b), and (c) of this section are not required for:

(1) Processed ores containing less than five (5) percent of uranium or thorium, or any combination of uranium or thorium, by dry weight;

(2) Thorium contained in magnesium-thorium and tungsten-thorium alloys, if the thorium content in the alloys does not exceed 4 percent by weight;

(3) Chemical catalysts containing uranium depleted in the U-235 isotope to 0.4 percent or less, if the uranium content of the catalyst does not exceed 15 percent by weight; or

(4) Any source material contained in non-nuclear end use devices or components, including but not limited to permanently installed shielding, teletherapy, radiography, X-ray, accelerator devices, or munitions.

(e) Any licensee who is required to submit inventory change reports and material status reports pursuant to Part 75 of this chapter (pertaining to implementation of the US/IAEA Safeguards Agreement) shall prepare and submit such reports only as provided in §§ 75.34 and 75.35 of this chapter (instead of as provided in paragraphs (a) and (b) of this section).

[35 FR 12195, July 30, 1970, as amended at 36 FR 10938, June 5, 1971; 38 FR 1272, Jan. 11, 1973; 38 FR 2330, Jan. 24, 1973; 40 FR 8787, Mar. 3, 1975; 41 FR 16446, Apr. 19, 1976; 45 FR 50710, July 31, 1980; 49 FR 24707, June 15, 1984; 51 FR 9766, Mar. 21, 1986; 52 FR 31611, Aug. 21, 1987]

§ 40.65 Effluent monitoring reporting requirements.

(a) Each licensee authorized to possess and use source material in uranium milling or production of uranium hexafluoride, shall:

(1) Submit a report to the appropriate NRC Regional Office shown in Appendix D of Part 20 of this chapter, with copies to the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, within 60 days after January 1, 1976 and July 1, 1976, and within 60 days after January 1 and July 1 of each year thereafter, specifying the quantity of each of the principal radionuclides released to unrestricted areas in liquid and in gaseous effluents during the previous six months of operation, and such other information the Commission may require to estimate maximum potential annual radiation doses to the public resulting from effluent releases. If quantities of radioactive materials released during the reporting period are significantly above the licensee's design objectives previously reviewed as part of the licensing action, the report shall cover this specifically. On the basis of such reports and any additional information the Commission may obtain from the licensee or others, the Commission may from time to time require the licensee to take such action as the Commission deems appropriate.

[40 FR 53230, Nov. 17, 1975, as amended at 41 FR 21627, May 27, 1976; 42 FR 25721, May 19, 1977; 52 FR 31611, Aug. 21, 1987]

§ 40.66 Requirements for advance notice of export shipments of natural uranium.

(a) Each licensee authorized to export natural uranium, other than in the form of ore or ore residue, in amounts exceeding 500 kilograms, shall notify the Division of Safeguards and Transportation, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

The notification must be in writing and must be received at least 10 days before transport of the shipment commences at the shipping facility.

(b) The notification must include the following information:

(1) The name(s), address(es), and telephone number(s) of the shipper, receiver, and carrier(s);

(2) A physical description of the shipment;

(3) A listing of the mode(s) of shipment, transfer points, and routes to be used;

(4) The estimated date and time that shipment will commence and that each nation (other than the United States) along the route is scheduled to be entered; and

(5) A certification that arrangements have been made to notify the Division of Safeguards and Transportation when the shipment is received at the receiving facility.

(c) A licensee who needs to amend a notification may do so by telephoning the Division of Safeguards and Transportation at 301-492-3365.

[52 FR 9651, Mar. 26, 1987, as amended at 53 FR 4110, Feb. 12, 1988]

§ 40.67 Requirement for advance notice for importation of natural uranium from countries that are not party to the Convention on the Physical Protection of Nuclear Material.

(a) Each licensee authorized to import natural uranium, other than in the form of ore or ore residue, in amounts exceeding 500 kilograms, from countries not party to the Convention on the Physical Protection of Nuclear Material (see Appendix F of Part 73 of this chapter) shall notify the Division of Safeguards and Transportation, U.S. Nuclear Regulatory Commission, Washington, DC 20555. The notification must be in writing and must be received at least 10 days before transport of the shipment commences at the shipping facility.

(b) The notification must include the following information:

(1) The name(s), address(es), and telephone number(s) of the shipper, receiver, and carrier(s);

(2) A physical description of the shipment;

(3) A listing of the mode(s) of shipment, transfer points, and routes to be used;

(4) The estimated date and time that shipment will commence and that each nation along the route is scheduled to be entered.

(c) The licensee shall notify the Division of Safeguards and Transportation by telephone at 301-492-3365 when the shipment is received at the receiving facility.

(d) A licensee who needs to amend a notification may do so by telephoning the Division of Safeguards and Transportation at 301-492-3365.

[52 FR 9652, Mar. 26, 1987, as amended at 53 FR 4110, Feb. 12, 1988]

MODIFICATION AND REVOCATION OF LICENSES

§ 40.71 Modification and revocation of licenses.

(a) The terms and conditions of each license shall be subject to amendment, revision, or modification by reason of amendments to the Act, or by reason of rules, regulations, or orders issued in accordance with the Act.

(b) Any license may be revoked, suspended, or modified, in whole or in part, for any material false statement in the application or any statement of fact required under section 182 of the Act, or because of conditions revealed by such application or statement of fact or any report, record, or inspection or other means which would warrant the Commission to refuse to grant a license on an original application, or for violation of, or failure to observe any of, the terms and conditions of the Act, or the license, or of any rule, regulation or order of the Commission.

(c) Except in cases of willfulness or those in which the public health, interest or safety requires otherwise, no license shall be modified, suspended, or revoked unless, prior to the institution of proceedings therefor, facts or conduct which may warrant such action shall have been called to the attention of the licensee in writing and the licensee shall have been accorded opportunity to demonstrate or achieve compliance with all lawful requirements.

[26 FR 284, Jan. 14, 1961, as amended at 35 FR 11460, July 17, 1970; 48 FR 32328, July 15, 1983]

ENFORCEMENT

§ 40.81 Violations.

An injunction or other court order may be obtained prohibiting any violation of any provision of the Atomic Energy Act of 1954, as amended, or Title II of the Energy Reorganization Act of 1974, or any regulation or order issued thereunder. A court order may be obtained for the payment of a civil penalty imposed pursuant to section 234 of the Act for violation of section 53, 57, 62, 63, 81, 82, 101, 103, 104, 107, or 109 of the Act, or section 206 of the Energy Reorganization Act of 1974, or any rule, regulation, or order issued thereunder, or any term, condition, or limitation of any license issued thereunder, or for any violation for which a license may be revoked under section 186 of the Act. Any person who willfully violates any provision of the Act or any regulation or order issued thereunder may be guilty of a crime and, upon conviction, may be punished by fine or imprisonment or both, as provided by law.

[40 FR 8787, Mar. 3, 1975]

Appendix A to Part 40—Criteria Relating to the Operation of Uranium Mills and the Disposition of Tailings or Wastes Produced by the Extraction or Concentration of Source Material From Ores Processed Primarily for Their Source Material Content

Introduction. Every applicant for a license to possess and use source material in conjunction with uranium or thorium milling, or byproduct material at sites formerly associated with such milling, is required by the provisions of § 40.31(h) to include in a license application proposed specifications relating to milling operations and the disposition of tailings or wastes resulting from such milling activities. This appendix establishes technical, financial, ownership, and long-term site surveillance criteria relating to the siting, operation, decontamination, decommissioning, and reclamation of mills and tailings or waste systems and sites at which such mills and systems are located. As used in this appendix, the term "as low as is reasonably achievable" has the same meaning as in § 20.1(c) of 10 CFR Part 20 of this chapter.

In many cases, flexibility is provided in the criteria to allow achieving an optimum tailings disposal program on a site-specific basis. However, in such cases the objectives, technical alternatives and concerns which must be taken into account in developing a tailings program are identified. As provided by the provisions of § 40.31(h) applications for licenses must clearly demonstrate how the criteria have been addressed.

The specifications must be developed considering the expected full capacity of tailings or waste systems and the lifetime of mill operations. Where later expansions of systems or operations may be likely (for example, where large quantities of ore now marginally uneconomical may be stockpiled), the amenability of the disposal system to accommodate increased capacities without degradation in long-term stability and other performance factors must be evaluated.

Licensees or applicants may propose alternatives to the specific requirements in this Appendix. The alternative proposals may take into account local or regional conditions, including geology, topography, hydrology, and meterology. The Commission may find that the proposed alternatives meet the Commission's requirements if the alternatives will achieve a level of stabilization and containment of the sites concerned, and a level of protection for public health, safety, and the environment from radiological and nonradiological hazards associated with the sites, which is equivalent to, to the extent practicable, or more stringent than the level which would be achieved by the requirements of this Appendix and the standards promulgated by the Environmental Protection Agency in 40 CFR Part 192, Subparts D and E.

All site specific licensing decisions based on the criteria in this Appendix or alternatives proposed by licensees or applicants will take into account the risk to the public health and safety and the environment with due consideration to the economic costs involved and any other factors the Commission determines to be appropriate. In implementing this Appendix, the Commission will consider "practicable" and "reasonably achievable" as equivalent terms. Decisions involved these terms will take into account the state of technology, and the economics of improvements in relation to benefits to the public health and safety, and other societal and socioeconomic considerations, and in relation to the utilization of atomic energy in the public interest.

The following definitions apply to the specified terms as used in this Appendix:

"Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of ground water to wells or springs. Any saturated zone created by uranium or thorium recovery operations would not be considered an aquifer unless the zone is or potentially is (1) hydraulically interconnected to a natural aquifer, (2) capable of discharge to surface water, or (3) reasonably accessible because of migration beyond the vertical projection of the boundary of the land transferred for long-term government ownership and care in accordance with Criterion 11 of this appendix.

"Closure" means the activities following operations to decontaminate and decommission the buildings and site used to produce byproduct materials and reclaim the tailings and/or waste disposal area.

"Closure plan" means the Commission approved plan to accomplish closure.

"Compliance period" begins when the Commission sets secondary ground-water protection standards and ends when the owner or operator's license is terminated and the site is transferred to the State or Federal agency for long-term care.

"Dike" means an embankment or ridge of either natural or man-made materials used to prevent the movement of liquids, sludges, solids or other materials.

"Disposal area" means the area containing byproduct materials to which the requirements of Criterion 6 apply.

"Existing portion" means that land surface area of an existing surface impoundment on which significant quantities of uranium or thorium byproduct materials had been placed prior to September 30, 1983.

"Ground water" means water below the land surface in a zone of saturation. For purposes of this appendix, ground water is the water contained within an aquifer as defined above.

"Leachate" means any liquid, including any suspended or dissolved components in the liquid, that has percolated through or drained from the byproduct material.

"Licensed site" means the area contained within the boundary of a location under the control of persons generating or storing byproduct materials under a Commission license.

"Liner" means a continuous layer of natural or man-made materials, beneath or on the sides of a surface impoundment which restricts the downward or lateral escape of byproduct material, hazardous constituents, or leachate.

"Point of compliance" is the site specific location in the uppermost aquifer where the ground-water protection standard must be met.

"Surface impoundment" means a natural topographic depression, man-made excavation, or diked area, which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well.

"Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.

I. Technical Criteria

Criterion 1—The general goal or broad objective in siting and design decisions is permanent isolation of tailings and associated contaminants by minimizing disturbance and dispersion by natural forces, and to do so without ongoing maintenance. For practical reasons, specific siting decisions and design standards must involve finite times (e.g., the longevity design standard in Criterion 6). The following site features which will contribute to such a goal or objective must be considered in selecting among alternative tailings disposal sites or judging the adequacy of existing tailings sites:

Remoteness from populated areas;

Hydrologic and other natural conditions as they contribute to continued immobilization and isolation of contaminants from ground-water sources; and

Potential for minimizing erosion, disturbance, and dispersion by natural forces over the long term.

The site selection process must be an optimization to the maximum extent reasonably achievable in terms of these features.

In the selection of disposal sites, primary emphasis must be given to isolation of tailings or wastes, a matter having long-term impacts, as opposed to consideration only of short-term convenience or benefits, such as minimization of transportation or land acquisition costs. While isolation of tailings will be a function of both site and engineering design, overriding consideration must be given to siting features given the long-term nature of the tailings hazards.

Tailings should be disposed of in a manner that no active maintenance is required to preserve conditions of the site.

Criterion 2—To avoid proliferation of small waste disposal sites and thereby reduce perpetual surveillance obligations, byproduct material from in situ extraction operations, such as residues from solution evaporation or contaminated control processes, and wastes from small remote above ground extraction operations must be disposed of at existing large mill tailings disposal sites; unless, considering the nature of the wastes, such as their volume and specific activity, and the costs and environmental impacts of transporting the wastes to a large disposal site, such offsite disposal is demonstrated to be impracticable or the advantages of onsite burial clearly outweigh the benefits of reducing the perpetual surveillance obligations.

Criterion 3—The "prime option" for disposal of tailings is placement below grade, either in mines or specially excavated pits (that is, where the need for any specially constructed retention structure is eliminated). The evaluation of alternative sites and disposal methods performed by mill operators in support of their proposed tailings disposal program (provided in applicants' environmental reports) must reflect serious consideration of this disposal mode. In some instances, below grade disposal may not be the most environmentally sound approach, such as might be the case if a ground-water formation is relatively close to the surface or not very well isolated by overlying soils and rock. Also, geologic and topographic conditions might make full below grade burial impracticable: For example, bedrock may be sufficiently near the surface that blasting would be required to excavate a disposal pit at excessive cost, and more suitable alternative sites are not available. Where full below grade burial is not practicable, the size of retention structures, and size and steepness of slopes associated exposed embankments must be minimized by excavation to the maximum extent reasonably achievable or appropriate given the geologic and hydrologic conditions at a site. In these cases, it must be demonstrated that an above grade disposal program will provide reasonably equivalent isolation of the tailings from natural erosional forces.

Criterion 4—The following site and design criteria must be adhered to whether tailings or wastes are disposed of above or below grade.

(a) Upstream rainfall catchment areas must be minimized to decrease erosion potential and the size of the floods which could erode or wash out sections of the tailings disposal area.

(b) Topographic features should provide good wind protection.

(c) Embankment and cover slopes must be relatively flat after final stabilization to minimize erosion potential and to provide conservative factors of safety assuring long-term stability. The broad objective should be to contour final slopes to grades which are as close as possible to those which would be provided if tailings were disposed of below grade; this could, for example, lead to slopes of about 10 horizontal to 1 vertical (10h:1v) or less steep. In general, slopes should not be steeper than about 5h:1v. Where steeper slopes are proposed, reasons why a slope less steep than 5h:1v would be impracticable should be provided, and compensating factors and conditions which make such slopes acceptable should be identified.

(d) A full self-sustaining vegetative cover must be established or rock cover employed to reduce wind and water erosion to negligible levels.

Where a full vegetative cover is not likely to be self-sustaining due to climatic or other conditions, such as in semi-arid and arid regions, rock cover must be employed on slopes of the impoundment system. The NRC will consider relaxing this requirement for extremely gentle slopes such as those which may exist on the top of the pile.

The following factors must be considered in establishing the final rock cover design to avoid displacement of rock particles by human and animal traffic or by natural process, and to preclude undercutting and piping:

Shape, size, composition, and gradation of rock particles (excepting bedding material average particles size must be at least cobble size or greater);

Rock cover thickness and zoning of particles by size; and

Steepness of underlying slopes.

Individual rock fragments must be dense, sound, and resistant to abrasion, and must be free from cracks, seams, and other defects that would tend to unduly increase their destruction by water and frost actions. Weak, friable, or laminated aggregate may not be used.

Rock covering of slopes may be unnecessary where top covers are very thick (on the order of 10m or greater); impoundment slopes are very gentle (on the order of 10 h:1v or less); bulk cover materials have inherently favorable erosion resistance characteristics; and, there is negligible drainage catchment area upstream of the pile and good wind protection as described in points (a) and (b) of this Criterion.

Furthermore, all impoundment surfaces must be contoured to avoid areas of concentrated surface runoff or abrupt or sharp changes in slope gradient. In addition to rock cover on slopes, areas toward which surface runoff might be directed must be well protected with substantial rock cover (rip rap). In addition to providing for stability of the impoundment system itself, overall stability, erosion potential, and geomorphology of surrounding terrain must be evaluated to assure that there are not ongoing or potential processes, such as gully erosion, which would lead to impoundment instability.

(e) The impoundment may not be located near a capable fault that could cause a maximum credible earthquake larger than that which the impoundment could reasonably be expected to withstand. As used in this criterion, the term "capable fault" has the same meaning as defined in section III(g) of Appendix A of 10 CFR Part 100. The term "maximum credible earthquake" means that earthquake which would cause the maximum vibratory ground motion based upon an evaluation of earthquake potential considering the regional and local geology and seismology and specific characteristics of local subsurface material.

(f) The impoundment, where feasible, should be designed to incorporate features which will promote deposition. For example, design features which promote deposition of sediment suspended in any runoff which flows into the impoundment area might be utilized; the object of such a design feature would be to enhance the thickness of cover over time.

Criterion 5—Criteria 5A-5D and new Criterion 13 incorporate the basic ground-water protection standards imposed by the Environmental Protection Agency in 40 CFR Part 192, Subparts D and E (48 FR 45926; October 7, 1983) which apply during operations and prior to the end of closure. Ground-water monitoring to comply with these standards is required by Criterion 7A.

5A(1)—The primary ground-water protection standard is a design standard for surface impoundments used to manage uranium and thorium byproduct material. Unless exempted under paragraph 5A(3) of this criterion, surface impoundments (except for an existing portion) must have a liner that is designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil, ground water, or surface water at any time during the active life (including the closure period) of the impoundment. The liner may be constructed of materials that may allow wastes to migrate into the liner (but not into the adjacent subsurface soil, ground water, or surface water) during the active life of the facility, provided that impoundment closure includes removal or decontamination of all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate. For impoundments that will be closed with the liner material left in place, the liner must be constructed of materials that can prevent wastes from migrating into the liner during the active life of the facility.

5A(2)—The liner required by paragraph 5A(1) above must be—

(a) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(b) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(c) Installed to cover all surrounding earth likely to be in contact with the wastes or leachate.

5A(3)—The applicant or licensee will be exempted from the requirements of paragraph 5A(1) of this criterion if the Commission finds, based on a demonstration by the applicant or licensee, that alternate design and operating practices, including the closure plan, together with site characteristics will prevent the migration of any hazardous constituents into ground water or surface water at any future time. In deciding whether to grant an exemption, the Commission will consider—

(a) The nature and quantity of the wastes;

(b) The proposed alternate design and operation;

(c) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the impoundment and ground water or surface water; and

(d) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

5A(4)—A surface impoundment must be designed, constructed, maintained, and operated to prevent overtopping resulting from normal or abnormal operations, overfilling, wind and wave actions, rainfall, or run-on; from malfunctions of level controllers, alarms, and other equipment; and from human error.

5A(5)—When dikes are used to form the surface impoundment, the dikes must be designed, constructed, and maintained with sufficient structural integrity to prevent massive failure of the dikes. In ensuring structural integrity, it must not be presumed that the liner system will function without leakage during the active life of the impoundment.

5B(1)—Uranium and thorium byproduct materials must be managed to conform to the following secondary ground-water protection standard: Hazardous constituents entering the ground water from a licensed site must not exceed the specified concentration limits in the uppermost aquifer beyond the point of compliance during the compliance period. Hazardous constituents are those constituents identified by the Commission pursuant to paragraph 5B(2) of this criterion. Specified concentration limits are those limits established by the Commission as indicated in paragraph 5B(5) of this criterion. The Commission will also establish the point of compliance and compliance period on a site specific basis through license conditions and orders. The objective in selecting the point of compliance is to provide the earliest practicable warning that the impoundment is releasing hazardous constituents to the ground water. The point of compliance must be selected to provide prompt indication of ground-water contamination on the hydraulically downgradient edge of the disposal area. The Commission shall identify hazardous constituents, establish concentration limits, set the compliance period, and may adjust the point of compliance if needed to accord with developed data and site information as to the flow of ground water or contaminants when the detection monitoring established under Criterion 7A indicates leakage of hazardous constituents from the disposal area.

5B(2)—A constituent becomes a hazardous constituent subject to paragraph 5B(5) only when the constituent meets all three of the following tests:

(a) The constituent is reasonably expected to be in or derived from the byproduct material in the disposal area;

(b) The constituent has been detected in the ground water in the uppermost aquifer; and

(c) The constituent is listed in Criterion 13 of this appendix.

5B(3)—Even when constituents meet all three tests in paragraph 5B(2) of this criterion, the Commission may exclude a detected constituent from the set of hazardous constituents on a site specific basis if it finds that the constituent is not capable of posing a substantial present or potential hazard to human health or the environment. In deciding whether to exclude constituents, the Commission will consider the following:

(a) Potential adverse effects on ground-water quality, considering—

(i) The physical and chemical characteristics of the waste in the licensed site, including its potential for migration;

(ii) The hydrogeological characteristics of the facility and surrounding land;

(iii) The quantity of ground water and the direction of ground-water flow;

(iv) The proximity and withdrawal rates of ground-water users;

(v) The current and future uses of ground water in the area;

(vi) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground-water quality;

(vii) The potential for health risks caused by human exposure to waste constituents;

(viii) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;

(ix) The persistence and permanence of the potential adverse effects.

(b) Potential adverse effects on hydraulically-connected surface water quality, considering—

(i) The volume and physical and chemical characteristics of the waste in the licensed site;

(ii) The hydrogeological characteristics of the facility and surrounding land;

(iii) The quantity and quality of ground water, and the direction of ground-water flow;

(iv) The patterns of rainfall in the region;

(v) The proximity of the licensed site to surface waters;

(vi) The current and future uses of surface waters in the area and any water quality standards established for those surface waters;

(vii) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface-water quality;

(viii) The potential for health risks caused by human exposure to waste constituents;

(ix) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(x) The persistence and permanence of the potential adverse effects.

5B(4)—In making any determinations under paragraphs 5B(3) and 5B(6) of this criterion about the use of ground water in the area around the facility, the Commission will consider any identification of underground sources of drinking water and exempted aquifers made by the Environmental Protection Agency.

5B(5)—At the point of compliance, the concentration of a hazardous constituent must not exceed—

(a) The Commission approved background concentration of that constituent in the ground water;

(b) The respective value given in the table in paragraph 5C if the constituent is listed in the table and if the background level of the constituent is below the value listed; or

(c) An alternate concentration limit established by the Commission.

5B(6)—Conceptually, background concentrations pose no incremental hazards and the drinking water limits in paragraph 5C state acceptable hazards but these two options may not be practically achievable at a specific site. Alternate concentration limits that present no significant hazard may be proposed by licensees for Commission consideration. Licensees must provide the basis for any proposed limits including consideration of practicable corrective actions, that limits are as low as reasonably achievable, and information on the factors the Commission must consider. The Commission will establish a site specific alternate concentration limit for a hazardous constituent as provided in paragraph 5B(5) of this criterion if it finds that the proposed limit is as low as reasonably achievable, after considering practicable corrective actions, and that the constituent will not pose a substantial present or potential hazard to human health or the environment as long as the alternate concentration limit is not exceeded. In making the present and potential hazard finding, the Commission will consider the following factors:

(a) Potential adverse effects on ground-water quality, considering—

(i) The physical and chemical characteristics of the waste in the licensed site including its potential for migration;

(ii) The hydrogeological characteristics of the facility and surrounding land;

(iii) The quantity of ground water and the direction of ground-water flow;

(iv) The proximity and withdrawal rates of ground-water users;

(v) The current and future uses of ground water in the area;

(vi) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground-water quality;

(vii) The potential for health risks caused by human exposure to waste constituents;

(viii) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;

(ix) The persistence and permanence of the potential adverse effects.

(b) Potential adverse effects on hydraulically-connected surface water quality, considering—

(i) The volume and physical and chemical characteristics of the waste in the licensed site;

(ii) The hydrogeological characteristics of the facility and surrounding land;

(iii) The quantity and quality of ground water, and the direction of ground-water flow;

(iv) The patterns of rainfall in the region;

(v) The proximity of the licensed site to surface waters;

(vi) The current and future uses of surface waters in the area and any water quality standards established for those surface waters;

(vii) The existing quality of surface water including other sources of contamination and the cumulative impact on surface water quality;

(viii) The potential for health risks caused by human exposure to waste constituents;

(ix) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(x) The persistence and permanence of the potential adverse effects.

5C—MAXIMUM VALUES FOR GROUND-WATER PROTECTION

Constituent or property	Maximum concentration
Milligrams per liter:	
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Lead	0.05
Mercury	0.002
Selenium	0.01
Silver	0.05
Endrin (1,2,3,4,10,10-hexachloro-1,7 -expoxy-1,4,4a,5, 6,7,8,9a-octahydro-1, 4-endo, endo-5,8-dimethano naphthalene)	0.0002
Lindane (1,2,3,4,5,6-hexachlorocyclohexane, gamma isomer)	0.004
Methoxychlor (1,1,1-Trichloro-2,2-bis (p-methoxyphenylethane)	0.1
Toxaphene ($C_{10}H_{10}Cl_8$, Technical chlorinated camphene, 67–69 percent chlorine)	0.005
2,4-D (2,4-Dichlorophenoxyacetic acid)	0.1
2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid)	0.01
Picocuries per liter:	
Combined radium-226 and radium -228	5
Gross alpha—particle activity (excluding radon and uranium when producing uranium byproduct material or radon and thorium when producing thorium byproduct material)	15

5D—If the ground-water protection standards established under paragraph 5B(1) of this criterion are exceeded at a licensed site, a corrective action program must be put into operation as soon as is practicable, and in no event later than eighteen (18) months after the Commission finds that the standards have been exceeded. The licensee shall submit the proposed corrective action program and supporting rationale for Commission approval prior to putting the program into operation, unless otherwise directed by the Commission. The objective of the program is to return hazardous constituent concentration levels in ground water to the concentration limits set as standards. The licensee's proposed program must address removing the hazardous constituents that have entered the ground water at the point of compliance or treating them in place. The program must also address removing or treating in place any hazardous constituents that exceed concentration limits in ground water between the point of compliance and the downgradient facility property boundary. The licensee shall continue corrective action measures to the extent necessary to achieve and maintain compliance with the ground-water protection standard. The Commission will determine when the licensee may terminate corrective action measures based on data from the ground-water monitoring program and other information that provide reasonable assurance that the ground-water protection standard will not be exceeded.

5E—In developing and conducting ground-water protection programs, applicants and licensees shall also consider the following:

(1) Installation of bottom liners (Where synthetic liners are used, a leakage detection system must be installed immediately below the liner to ensure major failures are detected if they occur. This is in addition to the ground-water monitoring program conducted as provided in Criterion 7. Where clay liners are proposed or relatively thin, in-situ clay soils are to be relied upon for seepage control, tests must be conducted with representative tailings solutions and clay materials to confirm that no significant deterioration of permeability or stability properties will occur with continuous exposure of clay to tailings solutions. Tests must be run for a sufficient period of time to reveal any effects if they are going to occur (in some cases deterioration has been observed to occur rather rapidly after about nine months of exposure)).

(2) Mill process designs which provide the maximum practicable recycle of solutions and conservation of water to reduce the net input of liquid to the tailings impoundment.

(3) Dewatering of tailings by process devices and/or in-situ drainage systems (At new sites, tailings must be dewatered by a drainage system installed at the bottom of the impoundment to lower the phreatic surface and reduce the driving head of seepage, unless tests show tailings are not amenable to such a system. Where in-situ dewatering is to be conducted, the impoundment

bottom must be graded to assure that the drains are at a low point. The drains must be protected by suitable filter materials to assure that drains remain free running. The drainage system must also be adequately sized to assure good drainage).

(4) Neutralization to promote immobilization of hazardous constituents.

5F—Where ground-water impacts are occurring at an existing site due to seepage, action must be taken to alleviate conditions that lead to excessive seepage impacts and restore ground-water quality. The specific seepage control and ground-water protection method, or combination of methods, to be used must be worked out on a site-specific basis. Technical specifications must be prepared to control installation of seepage control systems. A quality assurance, testing, and inspection program, which includes supervision by a qualified engineer or scientist, must be established to assure the specifications are met.

5G—In support of a tailings disposal system proposal, the applicant/operator shall supply information concerning the following:

(1) The chemical and radioactive characteristics of the waste solutions.

(2) The characteristics of the underlying soil and geologic formations particularly as they will control transport of contaminants and solutions. This includes detailed information concerning extent, thickness, uniformity, shape, and orientation of underlying strata. Hydraulic gradients and conductivities of the various formations must be determined. This information must be gathered from borings and field survey methods taken within the proposed impoundment area and in surrounding areas where contaminants might migrate to ground water. The information gathered on boreholes must include both geologic and geophysical logs in sufficient number and degree of sophistication to allow determining significant discontinuities, fractures, and channeled deposits of high hydraulic conductivity. If field survey methods are used, they should be in addition to and calibrated with borehole logging. Hydrologic parameters such as permeability may not be determined on the basis of laboratory analysis of samples alone; a sufficient amount of field testing (e.g., pump tests) must be conducted to assure actual field properties are adequately understood. Testing must be conducted to allow estimating chemi-sorption attenuation properties of underlying soil and rock.

(3) Location, extent, quality, capacity and current uses of any ground water at and near the site.

5H—Steps must be taken during stockpiling of ore to minimize penetration of radionuclides into underlying soils; suitable methods include lining and/or compaction of ore storage areas.

Criterion 6—In disposing of waste byproduct material, licensees shall place an earthen cover over tailings or wastes at the end of milling operations and shall close the waste disposal area in accordance with a design[1] which provides reasonable assurance of control of radiological hazards to (i) be effective for 1,000 years, to the extend reasonably achievable, and, in any case, for at least 200 years, and (ii) limit releases of radon-222 from uranium byproduct materials, and radon-220 from thorium byproduct materials, to the atmosphere so as to not exceed an average[2] release rate of 20 picocuries per square meter per second (pCi/m^2s) to the extent practicable throughout the effective design life determined pursuant to (i) above. In computing required tailings cover thicknesses, moisture in soils in excess of amounts found normally in similar soils in similar circumstances may not be considered. Direct gamma exposure from the tailings or wastes should be reduced to background levels. The effects of any thin synthetic layer may not be taken into account in determining the calculated radon exhalation level. If non-soil materials are proposed as cover materials, it must be demonstrated that such materials will not crack or degrade by differential settlement, weathering, or other mechanism, over long-term time intervals.

Near surface cover materials (i.e., within the top three meters) may not include waste or rock that contains elevated levels of radium; soils used for near surface cover must be essentially the same, as far as radioactivity is concerned, as that of surrounding surface soils. This is to ensure that surface radon exhalation is not significantly above background because of the cover material itself.

The design requirements in this criterion for longevity and control of radon releases apply to any portion of a licensed and/or disposal site unless such portion contains a concentration of radium in land, averaged over areas of 100 square meters, which, as a result of byproduct material does not exceed the background level by more than:

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[1] The standard applies to design. Monitoring for radon after installation of an appropriately designed cover is not required.

[2] This average applies to the entire surface of each disposal area over periods of at least 1 year, but short compared to 100 years. Radon will come from both uranium byproduct materials and from covering materials. Radon emissions from covering materials should be estimated as part of developing a closure plan for each site. The standard, however, applies only to emissions from uranium byproduct materials to the atmosphere.

(i) 5 picocuries per gram (pCi/g) of radium-226, or, in the case of thorium byproduct material, radium-228, averaged over the first 15 centimeters (cm) below the surface, and (ii) 15 pCi/g of radium-226, or, in the case of thorium byproduct material, radium-228, averaged over 15-cm thick layers more than 15 cm below the surface.

The licensee shall also address the nonradiological hazards associated with the wastes in planning and implementing closure. The licensee shall ensure that disposal areas are closed in a manner that minimizes the need for further maintenance. To the extent necessary to prevent threats to human health and the environment, the licensee shall control, minimize, or eliminate post-closure escape of nonradiological hazardous constituents, leachate, contaminated rainwater, or waste decomposition products to the ground or surface waters or to the atmosphere.

Criterion 7—At least one full year prior to any major site construction, a preoperational monitoring program must be conducted to provide complete baseline data on a milling site and its environs. Throughout the construction and operating phases of the mill, an operational monitoring program must be conducted to measure or evaluate compliance with applicable standards and regulations; to evaluate performance of control systems and procedures; to evaluate environmental impacts of operation; and to detect potential long-term effects.

7A—The licensee shall establish a detection monitoring program needed for the Commission to set the site-specific ground-water protection standards in paragraph 5B(1) of this appendix. For all monitoring under this paragraph the licensee or applicant will propose for Commission approval as license conditions which constituents are to be monitored on a site specific basis. A detection monitoring program has two purposes.The initial purpose of the program is to detect leakage of hazardous constituents from the disposal area so that the need to set ground-water protection standards is monitored. If leakage is detected, the second purpose of the program is to generate data and information needed for the Commission to establish the standards under Criterion 5B. The data and information must provide a sufficient basis to identify those hazardous constituents which require concentration limit standards and to enable the Commission to set the limits for those constituents and the compliance period. They may also need to provide the basis for adjustments to the point of compliance. For licenses in effect September 30, 1983, the detection monitoring programs must have been in place by October 1, 1984. For licenses issued after September 30, 1983, the detection monitoring programs must be in place when specified by the Commission in

orders or license conditions. Once groun
water protection standards have been esta
lished pursuant to paragraph 5B(1), the
censee shall establish and implement a co
pliance monitoring program. The purpose
the compliance monitoring program is to d
termine that the hazardous constituent co
centrations in ground water continue
comply with the standards set by the Co
mission. In conjunction with a correct
action program, the licensee shall establi
and implement a corrective action monit
ing program. The purpose of the correct
action monitoring program is to demo
strate the effectiveness of the corrective
tions. Any monitoring program required
this paragraph may be based on existi
monitoring programs to the extent the e
isting programs can meet the stated obj
tive for the program.

Criterion 8—Milling operations must
conducted so that all airborne effluent
leases are reduced to levels as low as is re
sonably achievable. The primary means
accomplishing this must be by means
emission controls. Institutional contro
such as extending the site boundary and e
clusion area, may be employed to ensu
that offsite exposure limits are met, b
only after all practicable measures ha
been taken to control emissions at t
source. Notwithstanding the existence of i
dividual dose standards, strict control
emissions is necessary to assure that popu
tion exposures are reduced to the maximu
extent reasonably achievable and to avo
site contamination. The greatest potent
sources of offsite radiation exposure (asi
from radon exposure) are dusting from d
surfaces of the tailings disposal area n
covered by tailings solution and emissio
from yellowcake drying and packaging op
ations. During operations and prior to c
sure, radiation doses from radon emissio
from surface impoundments of uranium
thorium byproduct materials must be ke
as low as is reasonably achievable.

Checks must be made and logged hour
of all parameters (e.g., differential pressur
and scrubber water flow rates) that dete
mine the efficiency of yellowcake sta
emission control equipment operation. T
licensee shall retain each log as a record f
three years after the last entry in the log
made. It must be determined whether or n
conditions are within a range prescribed
ensure that the equipment is operating co
sistently near peak efficiency; correcti
action must be taken when performance
outside of prescribed ranges. Effluent co
trol devices must be operative at all tim
during drying and packaging operations a
whenever air is exhausting from the yello
cake stack. Drying and packaging ope
ations must terminate when controls are
operative. When checks indicate the equi

ment is not operating within the range prescribed for peak efficiency, actions must be taken to restore parameters to the prescribed range. When this cannot be done without shutdown and repairs, drying and packaging operations must cease as soon as practicable. Operations may not be restarted after cessation due to off-normal performance until needed corrective actions have been identified and implemented. All these cessations, corrective actions, and restarts must be reported to the appropriate NRC regional office as indicated in Criterion 8A, in writing, within ten days of the subsequent restart.

To control dusting from tailings, that portion not covered by standing liquids must be wetted or chemically stabilized to prevent or minimize blowing and dusting to the maximum extent reasonably achievable. This requirement may be relaxed if tailings are effectively sheltered from wind, such as may be the case where they are disposed of below grade and the tailings surface is not exposed to wind. Consideration must be given in planning tailings disposal programs to methods which would allow phased covering and reclamation of tailings impoundments because this will help in controlling particulate and radon emissions during operation. To control dusting from diffuse sources, such as tailings and ore pads where automatic controls do not apply, operators shall develop written operating procedures specifying the methods of control which will be utilized.

Milling operations producing or involving thorium byproduct material must be conducted in such a manner as to provide reasonable assurance that the annual dose equivalent does not exceed 25 millirems to the whole body, 75 millirems to the thyroid, and 25 millirems to any other organ of any member of the public as a result of exposures to the planned discharge of radioactive materials, radon-220 and its daughters excepted, to the general environment.

Uranium and thorium byproduct materials must be managed so as to conform to the applicable provisions of Title 40 of the Code of Federal Regulations, Part 440, "Ore Mining and Dressing Point Source Category: Effluent Limitations Guidelines and New Source Performance Standards, Subpart C, Uranium, Radium, and Vanadium Ores Subcategory," as codified on January 1, 1983.

Criterion 8A—Daily inspections of tailings or waste retention systems must be conducted by a qualified engineer or scientist and documented. The licensee shall retain the documentation for each daily inspection as a record for three years after the documentation is made. The appropriate NRC regional office as indicated in Appendix D to 10 CFR Part 20 of this chapter, or the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC, 20555, must be immediately notified of any failure in a tailings or waste retention system that results in a release of tailings or waste into unrestricted areas, or of any unusual conditions (conditions not contemplated in the design of the retention system) that is not corrected could indicate the potential or lead to failure of the system and result in a release of tailings or waste into unrestricted areas.

II. Financial Criteria

Criterion 9—Financial surety arrangements must be established by each mill operator prior to the commencement of operations to assure that sufficient funds will be available to carry out the decontamination and decommissioning of the mill and site and for the reclamation of any tailings or waste disposal areas. The amount of funds to be ensured by such surety arrangements must be based on Commission-approved cost estimates in a Commission-approved plan for (1) decontamination and decommissioning of mill buildings and the milling site to levels which allow unrestricted use of these areas upon decommissioning, and (2) the reclamation of tailings and/or waste areas in accordance with technical criteria delineated in Section I of this Appendix. The licensee shall submit this plan in conjunction with an environmental report that addresses the expected environmental impacts of the milling operation, decommissioning and tailings reclamation, and evaluates alternatives for mitigating these impacts. The surety must also cover the payment of the charge for long-term surveillance and control required by Criterion 10. In establishing specific surety arrangements, the licensee's cost estimates must take into account total costs that would be incurred if an independent contractor were hired to perform the decommissioning and recalmation work. In order to avoid unnecessary duplication and expense, the Commission may accept financial sureties that have been consolidated with financial or surety arrangements established to meet requirements of other Federal or state agencies and/or local governing bodies for such decommissioning, decontamination, reclamation, and long-term site surveillance and control, provided such arrangements are considered adequate to satisfy these requirements and that the portion of the surety which covers the decommissioning and reclamation of the mill, mill tailings site and associated areas, and the long-term funding charge is clearly identified and committed for use in accomplishing these activities. The licensees's surety mechanism will be reviewed annually by the Commission to assure, that sufficient funds would be available for completion of the reclamation plan if the work had to be performed by an independent contractor. The amount of surety liability should be adjusted to recognize any increases or decreases resulting from inflation, changes in engineering plans, activities performed, and any other conditions affecting costs. Regardless of whether reclamation is phased through the life of the operation or takes place at the end of operations, an appropriate portion of surety liability must be retained until final compliance with the reclamation plan is determined.

This will yield a surety that is at least sufficient at all times to cover the costs of decommissioning and reclamation of the areas that are expected to be disturbed before the next license renewal. The term of the surety mechanism must be open ended, unless it can be demonstrated that another arrangement would provide an equivalent level of assurance. This assurance would be provided with a surety instrument which is written for a specified period of time (e.g., 5 years) yet which must be automatically renewed unless the surety notifies the beneficiary (the Commission or the State regulatory agency) and the principal (the licensee) some reasonable time (e.g., 90 days) prior to the renewal date of their intention not to renew. In such a situation the surety requirement still exists and the licensee would be required to submit an acceptable replacement surety within a brief period of time to allow at least 60 days for the regulatory agency to collect.

Proof of forfeiture must not be necessary to collect the surety so that in the event that the licensee could not provide an acceptable replacement surety within the required time, the surety shall be automatically collected prior to its expiration. The conditions described above would have to be clearly stated on any surety instrument which is not open-ended, and must be agreed to by all parties. Financial surety arrangements generally acceptable to the Commission are:

(a) Surety bonds;

(b) Cash deposits;

(c) Certificates of deposits;

(d) Deposits of government securities;

(e) Irrevocable letters or lines of credit; and

(f) Combinations of the above or such other types of arrangements as may be approved by the Commission. However, self insurance, or any arrangement which essentially constitutes self insurance (e.g., a contract with a State or Federal agency), will not satisfy the surety requirement since this provides no additional assurance other than that which already exists through license requirements.

Criterion 10—A minimum charge of $250,000 (1978 dollars) to cover the costs of long-term surveillance must be paid by each mill operator to the general treasury of the United States or to an appropriate State agency prior to the termination of a uranium or thorium mill license.

If site surveillance or control requirements at a particular site are determined, on the basis of a site-specific evaluation, to be significantly greater than those specified in Criterion 12 (e.g., if fencing is determined to be necessary), variance in funding requirements may be specified by the Commission. In any case, the total charge to cover the costs of long-term surveillance must be such that, with an assumed 1 percent annual real interest rate, the collected funds will yield interest in an amount sufficient to cover the annual costs of site surveillance. The total charge will be adjusted annually prior to actual payment to recognize inflation. The inflation rate to be used is that indicated by the change in the Consumer Price Index published by the U.S. Department of Labor, Bureau of Labor Statistics.

III. Site and Byproduct Material Ownership

Criterion 11—A. These criteria relating to ownership of tailings and their disposal sites become effective on November 8, 1981, and apply to all licenses terminated, issued, or renewed after that date.

B. Any uranium or thorium milling license or tailings license must contain such terms and conditions as the Commission determines necessary to assure that prior to termination of the license, the licensee will comply with ownership requirements of this criterion for sites used for tailings disposal.

C. Title to the byproduct material licensed under this Part and land, including any interests therein (other than land owned by the United States or by a State) which is used for the disposal of any such byproduct material, or is essential to ensure the long term stability of such disposal site, must be transferred to the United States or the State in which such land is located, at the option of such State. In view of the fact that physical isolation must be the primary means of long-term control, and Government land ownership is a desirable supplementary measure, ownership of certain severable subsurface interests (for example, mineral rights) may be determined to be unnecessary to protect the public health and safety and the environment. In any case, however, the applicant/operator must demonstrate a serious effort to obtain such subsurface rights, and must, in the event that certain rights cannot be obtained, provide notification in local public land records of the fact that the land is being used for the disposal of radioactive material and is subject to either an NRC general or specific license prohibiting the disruption and disturbance of the tailings. In some rare cases such as may occur with deep burial where no ongoing site surveillance will be required, surface land ownership transfer requirements may be waived. For licenses issued before November 8, 1981, the Commission may take into account the status of the ownership of such land, and interests therein, and the ability of a licensee to transfer title and custody thereof to the United States or a State.

D. If the Commission subsequent to title transfer determines that use of the surface or subsurface estates, or both, of the land transferred to the United States or to a State will not endanger the public health, safety, welfare, or environment, the Commission may permit the use of the surface or subsurface estates, or both, of such land in a manner consistent with the provisions provided in these criteria. If the Commission permits such use of such land, it will provide the person who transferred such land with the right of first refusal with respect to such use of such land.

E. Material and land transferred to the United States or a State in accordance with this Criterion must be transferred without cost to the United States or a State other than administrative and legal costs incurred in carrying out such transfer.

F. The provisions of this part respecting transfer of title and custody to land and tailings and wastes do not apply in the case of lands held in trust by the United States for any Indian tribe or lands owned by such Indian tribe subject to a restriction against alienation imposed by the United States. In the case of such lands which are used for the disposal of byproduct material, as defined in this Part, the licensee shall enter into arrangements with the Commission as may be appropriate to assure the long-term surveillance of such lands by the United States.

IV. Long-Term Site Surveillance

Criterion 12—The final disposition of tailings, residual radioactive material, or wastes at milling sites should be such that ongoing active maintenance is not necessary to preserve isolation. As a minimum, annual site inspections must be conducted by the government agency responsible for long-term care of the disposal site to confirm its integrity and to determine the need, if any, for maintenance and/or monitoring. Results of the inspections for all the sites under the licensee's jurisdiction will be reported to the Commission annually within 90 days of the last site inspection in that calendar year. Any site where unusual damage or disruption is discovered during the inspection, however, will require a preliminary site inspection report to be submitted within 60 days. On the basis of a site specific evaluation, the Commission may require more frequent site inspections if necessary due to the features of a particular disposal site. In this case, a preliminary inspection report is required to be submitted within 60 days following each inspection.

V. Hazardous Constituents

Criterion 13—Secondary ground-water protection standards required by Criterion 5 of this appendix are concentration limits for individual hazardous constituents. The following list of constituents identifies the constituents for which standards must be set and complied with if the specific constituent is reasonably expected to be in or derived from the byproduct material and has been detected in ground water. For purposes of this Appendix, the property of gross alpha activity will be treated as if it is a hazardous constituent. Thus, when setting standards under paragraph 5B(5) of Criterion 5, the Commission will also set a limit for gross alpha activity. The Commission does not consider the following list imposed by 40 CFR Part 192 to be exhaustive and may determine other constituents to be hazardous on a case-by-case basis, independent of those specified by the U.S. Environmental Protection Agency in Part 192.

HAZARDOUS CONSTITUENTS

Acetonitrile (Ethanenitrile)
Acetophenone (Ethanone, 1-phenyl)
3-(alpha-Acetonylbenzyl)-4-hydroxycoumarin and salts (Warfarin)
2-Acetylaminofluorene (Acetamide, N-(9H-fluoren-2-yl)-)
Acetyl chloride (Ethanoyl chloride)
1-Acetyl-2-thiourea (Acetamide, N-(aminothioxomethyl)-)
Acrolein (2-Propenal)
Acrylamide (2-Propenamide)
Acrylonitrile (2-Propenenitrile)
Aflatoxins
Aldrin (1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a,8b-hexahydro-endo, exo-1,4:5,8-Dimethanonaphthalene)
Allyl alcohol (2-Propen-1-ol)
Aluminum phosphide
4-Aminobiphenyl ([1,1'-Biphenyl]-4-amine)
6-Amino-1,1a,2,8,8a,8b-hexahydro-8-(hydroxymethyl)-8a-methoxy-5-methylcarbamate azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, (ester) (Mitomycin C) (Azirino[2'3':3,4]pyrrolo(1,2-a)indole-4,7-dione, 6-amino-8-[((aminocabonyl)oxy)methyl]-1,1a,2,8,8a,8b-hexahydro-8a methoxy-5-methy-)
5-(Aminomethyl)-3-isoxazolol (3(2H)-Isoxazolone, 5-(aminomethyl)-) 4-Aminopyridine (4-Pyridinamine)
Amitrole (1H-1,2,4-Triazol-3-amine)
Aniline (Benzenamine)

Antimony and compounds, N.O.S.[3]
Aramite (Sulfurous acid, 2-chloroethyl-, 2-[4-(1,1-dimethylethyl) phenoxy]-1-methylethyl ester)
Arsenic and compounds, N.O.S.[3]
Arsenic acid (Orthoarsenic acid)
Arsenic pentoxide (Arsenic (V) oxide)
Arsenic trioxide (Arsenic (III) oxide)
Auramine (Benzenamine, 4,4'-carbonimidoylbis[N,N-Dimethyl-, monohydrochloride)
Azaserine (L-Serine, diazoacetate (ester))
Barium and compounds, N.O.S.[3]
Barium cyanide
Benz[c]acridine (3,4-Benzacridine)
Benz[a]anthracene (1,2-Benzanthracene)
Benzene (Cyclohexatriene)
Benzenearsonic acid (Arsonic acid, phenyl-)
Benzene, dichloromethyl- (Benzal chloride)
Benzenethiol (Thiophenol)
Benzidine ([1,1'-Biphenyl]-4,4'diamine)
Benzo[b]fluoranthene (2,3-Benzofluoranthene)
Benzo[j]fluoranthene (7,8-Benzofluoranthene)
Benzo[a]pyrene (3,4-Benzopyrene)
p-Benzoquinone (1,4-Cyclohexadienedione)
Benzotrichloride (Benzene, trichloromethyl)
Benzyl chloride (Benzene, (chloromethyl)-)
Beryllium and compounds, N.O.S.[3]
Bis(2-chloroethoxy)methane (Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-])
Bis(2-chloroethyl) ether (Ethane, 1,1'-oxybis[2-chloro-])
N,N-Bis(2-chloroethyl)-2-naphthylamine (Chlornaphazine)
Bis(2-chloroisopropyl) ether (Propane, 2,2'-oxybis[2-chloro-])
Bis(chloromethyl) ether (Methane, oxybis[chloro-])
Bis(2-ethylhexyl) phthalate (1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester)
Bromoacetone (2-Propanone, 1-bromo-)
Bromomethane (Methyl bromide)
4-Bromophenyl phenyl ether (Benzene, 1-bromo-4-phenoxy-)
Brucine (Strychnidin-10-one, 2,3-dimethoxy-)
2-Butanone peroxide (Methyl ethyl ketone, peroxide)
Butyl benzyl phthalate (1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester)
2-sec-Butyl-4,6-dinitrophenol (DNBP) (Phenol, 2,4-dinitro-6-(1-methylpropyl)-)
Cadmium and compounds, N.O.S.[3]
Calcium chromate (Chromic acid, calcium salt)
Calcium cyanide
Carbon disulfide (Carbon bisulfide)
Carbon oxyfluoride (Carbonyl fluoride)
Chloral (Acetaldehyde, trichloro-)
Chlorambucil (Butanoic acid, 4-[bis(2-chloroethyl)amino]benzene-)
Chlordane (alpha and gamma isomers) (4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-3,4,7,7a-tetrahydro-) (alpha and gamma isomers)
Chlorinated benzenes, N.O.S.[3]
Chlorinated ethane, N.O.S.[3]
Chlorinated fluorocarbons, N.O.S.[3]
Chlorinated naphthalene, N.O.S.[3]
Chlorinated phenol, N.O.S.[3]
Chloroacetaldehyde (Acetaldehyde, chloro-)
Chloroalkyl ethers, N.O.S.[3]
p-Chloroaniline (Benzenamine, 4-chloro-)
Chlorobenzene (Benzene, chloro-)
Chlorobenzilate (Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-,ethyl ester)
p-Chloro-m-cresol (Phenol, 4-chloro-3-methyl)
1-Chloro-2,3-epoxypropane (Oxirane, 2-(chloromethyl)-)
2-Chloroethyl vinyl ether (Ethene, (2-chloroethoxy)-)
Chloroform (Methane, trichloro-)
Chloromethane (Methyl chloride)
Chloromethyl methyl ether (Methane, chloromethoxy-)
2-Chloronaphthalene (Naphthalene, betachloro-)
2-Chlorophenol (Phenol, o-chloro-)
1-(o-Chlorophenyl)thiourea (Thiourea, (2-chlorophenyl)-)
3-Chloropropionitrile (Propanenitrile, 3-chloro-)
Chromium and compounds, N.O.S.[3]
Chrysene (1,2-Benzphenanthrene)
Citrus red No. 2 (2-Naphthol, 1-[(2,5-dimethoxyphenyl)azo]-)
Coal tars
Copper cyanide
Creosote (Creosote, wood)
Cresols (Cresylic acid) (Phenol, methyl-)
Crotonaldehyde (2-Butenal)
Cyanides (soluble salts and complexes) N.O.S.[3]
Cyanogen (Ethanedinitrile)
Cyanogen bromide (Bromine cyanide)
Cyanogen chloride (Chlorine cyanide)
Cycasin (beta-D-Glucopyranoside, (methyl-ONN-azoxy)methyl-)
2-Cyclohexyl-4,6-dinitrophenol (Phenol, 2-cyclohexyl-4,6-dinitro-)
Cyclophosphamide (2H-1,3,2,-Oxazaphosphorine, [bis(2-chloroethyl) amino]-tetrahydro-,2-oxide)
Daunomycin (5,12-Naphthacenedione, (8S-cis)-8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-)
DDD (Dichlorodiphenyldichloroethane) (Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)-)
DDE (Ethylene, 1,1-dichloro-2,2-bis(4-chlorophenyl)-)

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[3] The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in this list.

DDT (Dichlorodiphenyltrichloroethane) (Ethane, 1,1,1-trichloro-2,2-bis (p-chlorophenyl)-)

Diallate (S-(2,3-dichloroallyl) diisopropylthiocarbamate)

Dibenz[a,h]acridine (1,2,5,6-Dibenzacridine)

Dibenz[a,j]acridine (1,2,7,8-Dibenzacridine)

Dibenz[a,h]anthracene (1,2,5,6-Dibenzanthracene)

7H-Dibenzo[c,g]carbazole (3,4,5,6-Dibenzcarbazole)

Dibenzo[a,e]pyrene (1,2,4,5-Dibenzpyrene)

Dibenzo[a,h]pyrene (1,2,5,6-Dibenzpyrene)

Dibenzo[a,i]pyrene (1,2,7,8-Dibenzpyrene)

1,2-Dibromo-3-chloropropane (Propane, 1,2-dibromo-3-chloro-)

1,2-Dibromoethane (Ethylene dibromide)

Dibromomethane (Methylene bromide)

Di-n-butyl phthalate (1,2-Benzenedicarboxylic acid, dibutyl ester)

o-Dichlorobenzene (Benzene, 1,2-dichloro-)

m-Dichlorobenzene (Benzene, 1,3-dichloro-)

p-Dichlorobenzene (Benzene, 1,4-dichlor-)

Dichlorobenzene, N.O.S.[3] (Benzene, dichloro-, N.O.S.[3])

3,3'-Dichlorobenzidine ([1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-)

1,4-Dichloro-2-butene (2-Butene, 1,4-dichloro-)

Dichlorodifluoromethane (Methane, dichlorodifluoro-)

1,1-Dichloroethane (Ethylidene dichloride)

1,2-Dichloroethane (Ethylene dichloride)

trans-1,2-Dichloroethene (1,2-Dichloroethylene)

Dichloroethylene, N.O.S.[3] (Ethene, dichloro-, N.O.S.[3])

1,1-Dichloroethylene (Ethene, 1,1-dichloro-)

Dichloromethane (Methylene chloride)

2,4-Dichlorophenol (Phenol, 2,4-dichloro-)

2,6-Dichlorophenol (Phenol, 2,6-dichloro-)

2,4-Dichlorophenoxyacetic acid (2,4-D), salts and esters (Acetic acid, 2,4-dichlorophenoxy-, salts and esters)

Dichlorophenylarsine (Phenyl dichloroarsine)

Dichloropropane, N.O.S.[3] (Propane, dichloro-, N.O.S.[3])

1,2-Dichloropropane (Propylene dichloride)

Dichloropropanol, N.O.S.[3] (Propanol, dichloro-, N.O.S.[3])

Dichloropropene, N.O.S.[3] (Propene, dichloro-, N.O.S.[3])

1,3-Dichloropropene (1-Propene, 1,3-dichloro-)

Dieldin (1,2,3,4,10.10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octa-hydro-endo, exo-1,4:5,8-Dimethanonaphthalene)

1,2:3,4-Diepoxybutane (2,2'-Bioxirane)

Diethylarsine (Arsine, diethyl-)

N,N-Diethylhydrazine (Hydrazine, 1,2-diethyl)

O,O-Diethyl S-methyl ester of phosphorodithioic acid (Phosphorodithioic acid, O,O-diethyl S-methyl ester)

O,O-Diethylphosphoric acid, O-p-nitrophenyl ester (Phosphoric acid, diethyl p-nitrophenyl ester)

Diethyl phthalate (1,2-Benzenedicarboxylic acid, diethyl ester)

O,O-Diethyl O-2-pyrazinyl phosphorothioate (Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester)

Diethylstilbesterol (4,4'-Stilbenediol,alpha,alpha-diethyl, bis(dihydrogen phosphate, (E)-)

Dihydrosafrole (Benzene, 1,2-methylenedioxy-4-propyl-)

3,4-Dihydroxy-alpha-(methylamino)methyl benzyl alcohol (1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-)

Diisopropylfluorophosphate (DFP) (Phosphorofluoridic acid, bis(1-methylethyl) ester)

Dimethoate (Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester)

3,3'-Dimethoxybenzidine ([1,1'-Biphenyl]-4,4'-diamine, 3-3'-dimethoxy-)

p-Dimethylaminoazobenzene (Benzenamine, N,N-dimethyl-4-(phenylazo)-)

7,12-Dimethylbenz[a]anthracene (1,2-Benzanthracene, 7,12-dimethyl-)

3,3'-Dimethylbenzidine ([1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-)

Dimethylcarbamoyl chloride (Carbamoyl chloride, dimethyl-)

1,1-Dimethylhydrazine (Hydrazine, 1,1-dimethyl-)

1,2-Dimethylhydrazine (Hydrazine, 1,2-dimethyl-)

3,3-Dimethyl-1-(methylthio)-2-butanone, O-[(methylamino) carbonyl] oxime (Thiofanox)

alpha,alpha-Dimethylphenethylamine (Ethanamine, 1,1-dimethyl-2-phenyl-)

2,4-Dimethylphenol (Phenol, 2,4-dimethyl-)

Dimethyl phthalate (1,2-Benzenedicarboxylic acid, dimethyl ester)

Dimethyl sulfate (Sulfuric acid, dimethyl ester)

Dinitrobenzene, N.O.S.[3] (Benzene, dinitro-, N.O.S.[3])

4,6-Dinitro-o-cresol and salts (Phenol, 2,4-dinitro-6-methyl-, and salts)

2,4-Dinitrophenol (Phenol, 2,4-dinitro-)

2,4-Dinitrotoluene (Benzene, 1-methyl-2,4-dinitro-)

2,6-Dinitrotoluene (Benzene, 1-methyl-2,6-dinitro-)

Di-n-octyl phthalate (1,2-Benzenedicarboxylic acid, dioctyl ester)

1,4-Dioxane (1,4-Diethylene oxide)

Diphenylamine (Benzenamine, N-phenyl-)

1,2-Diphenylhydrazine (Hydrazine, 1,2-diphenyl-)

Di-n-propylnitrosamine (N-Nitroso-di-n-propylamine)

Disulfoton (O,O-diethyl S-[2-(ethylthio)ethyl] phosphorodithioate)

2,4-Dithiobiuret (Thioimidodicarbonic diamide)
Endosulfan (5-Norbornene, 2,3-dimethanol, 1,4,5,6,7,7-hexachloro-, cyclic sulfite)
Endrin and metabolites (1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,endo-1,4:5,8-dimethanonaphthalene, and metabolites)
Ethyl carbamate (Urethan) (Carbamic acid, ethyl ester)
Ethyl cyanide (propanenitrile)
Ethylenebisdithiocarbamic acid, salts and esters (1,2-Ethanediyl-biscarbamodithioic acid, salts and esters)
Ethyleneimine (Aziridine)
Ethylene oxide (Oxirane)
Ethylenethiourea (2-Imidazolidinethione)
Ethyl methacrylate (2-Propenoic acid, 2-methyl-, ethyl ester)
Ethyl methanesulfonate (Methanesulfonic acid, ethyl ester)
Fluoranthene (Benzo[j,k]fluorene)
Fluorine
2-Fluoroacetamide (Acetamide, 2-fluoro-)
Fluoroacetic acid, sodium salt (Acetic acid, fluoro-, sodium salt)
Formaldehyde (Methylene oxide)
Formic acid (Methanoic acid)
Glycidylaldehyde (1-Propanol-2,3-epoxy)
Halomethane, N.O.S.[3]
Heptachlor (4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-)
Heptachlor epoxide (alpha, beta, and gamma isomers) (4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7-tetrahydro-, alpha, beta, and gamma isomers)
Hexachlorobenzene (Benzene, hexachloro-)
Hexachlorobutadiene (1,3-Butadiene, 1,1,2,3,4,4-hexachloro-)
Hexachlorocyclohexane (all isomers) (Lindane and isomers)
Hexachlorocyclopentadiene (1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-)
Hexachloroethane (Ethane, 1,1,1,2,2,2-hexachloro-)
1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo,endo-dimethanonaphthalene (Hexachlorohexahydro-endo,endo-dimethanonaphthalene)
Hexachlorophene (2,2'-Methylenebis(3,4,6-trichlorophenol)
Hexachloropropene (1-Propene, 1,1,2,3,3,3-hexachloro-)
Hexaethyl tetraphosphate (Tetraphosphoric acid, hexaethyl ester)
Hydrazine (Diamine)
Hydrocyanic acid (Hydrogen cyanide)
Hydrofluoric acid (Hydrogen fluoride)
Hydrogen sulfide (Sulfur hydride)
Hydroxydimethylarsine oxide (Cacodylic acid)
Indeno (1,2,3-cd)pyrene (1,10-(1,2-phenylene)pyrene)
Iodomethane (Methyl iodide)
Iron dextran (Ferric dextran)
Isocyanic acid, methyl ester (Methyl isocyanate)
Isobutyl alcohol (1-Propanol, 2-methyl-)
Isosafrole (Benzene, 1,2-methylenedioxy-4-allyl-)
Kepone (Decachlorooctahydro-1,3,4-Methano-2H-cyclobuta[cd]pentalen-2-one)
Lasiocarpine (2-Butenoic acid, 2-methyl-, 7-[(2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester)
Lead and compounds, N.O.S.[3]
Lead acetate (Acetic acid, lead salt)
Lead phosphate (Phosphoric acid, lead salt)
Lead subacetate (Lead, bis(acetato-0)tetrahydroxytri-)
Maleic anhydride (2,5-Furandione)
Maleic hydrazide (1,2-Dihydro-3,6-pyridazinedione)
Malononitrile (Propanedinitrile)
Melphalan (Alanine, 3-[p-bis(2-chloroethyl)amino]phenyl-,L-)
Mercury fulminate (Fulminic acid, mercury salt)
Mercury and compounds, N.O.S.[3]
Methacrylonitrile (2-Propenenitrile, 2-methyl-)
Methanethiol (Thiomethanol)
Methapyrilene (Pyridine, 2-[(2-dimethylamino)ethyl]-2-thenylamino-)
Metholmyl (Acetimidic acid, N-[(methylcarbamoyl)oxy]thio-, methyl ester)
Methoxychlor (Ethane, 1,1,1-trichloro-2,2'-bis(p-methoxyphenyl)-)
2-Methylaziridine (1,2-Propylenimine)
3-Methylcholanthrene (Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-)
Methyl chlorocarbonate (Carbonochloridic acid, methyl ester)
4,4'-Methylenebis(2-chloroaniline) (Benzenamine, 4,4'-methylenebis- (2-chloro-)
Methyl ethyl ketone (MEK) (2-Butanone)
Methyl hydrazine (Hydrazine, methyl-)
2-Methyllactonitrile (Propanenitrile, 2-hydroxy-2-methyl-)
Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)
Methyl methanesulfonate (Methanesulfonic acid, methyl ester)
2-Methyl-2-(methylthio)propionaldehyde-o-(methylcarbonyl) oxime (Propanal, 2-methyl-2-(methylthio)-, 0-[(methylamino)carbonyl]oxime)
N-Methyl-N'-nitro-N-nitrosoguanidine (Guanidine, N-nitroso-N-methyl-N'- nitro-)
Methyl parathion (0,0-dimethyl 0-(4-nitrophenyl) phosphorothioate)
Methylthiouracil (4-IH-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-)
Molybdenum and compounds, N.O.S.[3]
Mustard gas (Sulfide, bis(2-chloroethyl)-)
Naphthalene
1,4-Naphthoquinone (1,4-Naphthalenedione)

1-Naphthylamine (alpha-Naphthylamine)
2-Naphthylamine (beta-Naphthylamine)
1-Naphthyl-2-thiourea (Thiourea, 1-naphthalenyl-)
Nickel and compounds, N.O.S.[3]
Nickel carbonyl (Nickel tetracarbonyl)
Nickel cyanide (Nickel (II) cyanide)
Nicotine and salts (Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts)
Nitric oxide (Nitrogen (II) oxide)
p-Nitroaniline (Benzenamine, 4-nitro-)
Nitrobenzine (Benzene, nitro-)
Nitrogen dioxide (Nitrogen (IV) oxide)
Nitrogen mustard and hydrochloride salt (Ethanamine, 2-chloro-, N-(2-chloroethyl)-N-methyl-, and hydrochloride salt)
Nitrogen mustard N-Oxide and hydrochloride salt (Ethanamine, 2-chloro-, N-(2-chloroethyl)-N-methyl-, and hydrochloride salt)
Nitroglycerine (1,2,3-Propanetriol, trinitrate)
4-Nitrophenol (Phenol, 4-nitro-)
4-Nitroquinoline-1-oxide (Quinoline, 4-nitro-1-oxide-)
Nitrosamine, N.O.S.[3]
N-Nitrosodi-n-butylamine (1-Butanamine, N-butyl-N-nitroso-)
N-Nitrosodiethanolamine (Ethanol, 2,2'-(nitrosoimino)bis-)
N-Nitrosodiethylamine (Ethanamine, N-ethyl-N-nitroso-)
N-Nitrosodimethylamine (Dimethylnitrosamine)
N-Nitroso-N-ethylurea (Carbamide, N-ethyl-N-nitroso-)
N-Nitrosomethylethylamine (Ethanamine, N-methyl-N-nitroso-)
N-Nitroso-N-methylurea (Carbamide, N-methyl-N-nitroso-)
N-Nitroso-N-methylurethane (Carbamic acid, methylnitroso-, ethyl ester)
N-Nitrosomethylvinylamine (Ethenamine, N-methyl-N-nitroso-)
N-Nitrosomorpholine (Morpholine, N-nitroso-)
N-Nitrosonornicotine (Nornicotine, N-nitroso-)
N-Nitrosopiperidine (Pyridine, hexahydro-, N-nitroso-)
Nitrosopyrrolidine (Pyrrole, tetrahydro-, N-nitroso-)
N-Nitrososarcosine (Sarcosine, N-nitroso-)
5-Nitro-o-toluidine (Benzenamine, 2-methyl-5-nitro-)
Octamethylpyrophosphoramide (Diphosphoramide, octamethyl-)
Osmium tetroxide (Osmium (VIII) oxide)
7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid (Endothal)
Paraldehyde (1,3,5-Trioxane, 2,4,6-trimethyl-)
Parathion (Phosphorothioic acid, O,O-diethyl O-(p-nitrophenyl)ester)
Pentachlorobenzene (Benzene, pentachloro-)
Pentachloroethane (Ethane, pentachloro-)
Pentachloronitrobenzene (PCNB) (Benzene, pentachloronitro-)
Pentachlorophenol (Phenol, pentachloro-)
Phenacetin (Acetamide, N-(4-ethoxyphenyl)-)
Phenol (Benzene, hydroxy-)
Phenylenediamine (Benzenediamine)
Phenylmercury acetate (Mercury, acetatophenyl-)
N-Phenylthiourea (Thiourea, phenyl-)
Phosgene (Carbonyl chloride)
Phosphine (Hydrogen phosphide)
Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester (Phorate)
Phosphorothioic acid, O,O-dimethyl O-[p-((dimethylamino)sulfonyl)phenyl] ester (Famphur)
Phthalic acid esters, N.O.S.[3] (Benzene, 1,2-dicarboxylic acid, esters, N.O.S.[3])
Phthalic anhydride (1,2-Benzenedicarboxylic acid anhydride)
2-Picoline (Pyridine, 2-methyl-)
Polychlorinated biphenyl, N.O.S.[3]
Potassium cyanide
Potassium silver cyanide (Argentate(1-), dicyano-, potassium)
Pronamide (3,5-Dichloro-N-(1,1-dimethyl-2-propynyl)benzamide)
1,3-Propane sultone (1,2-Oxathiolane, 2,2-dioxide)
n-Propylamine (1-Propanamine)
Propylthiouracil (Undecamethylenediamine, N,N'-bis(2-chlorobenzyl-), dihydrochloride)
2-Propyn-1-ol (Propargyl alcohol)
Pyridine
Radium -226 and -228
Reserpine (Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[3,4,5-trimethoxybenzoyl)oxy]-, methyl ester)
Resorcinol (1,3-Benzenediol)
Saccharin and salts (1,2-Benzoisothiazolin-3-one, 1,1-dioxide, and salts)
Safrole (Benzene, 1,2-methylenedioxy-4-allyl-)
Selenious acid (Selenium dioxide)
Selenium and compounds, N.O.S.[3]
Selenium sulfide (Sulfur selenide)
Selenourea (Carbamimidoselenoic acid)
Silver and compounds, N.O.S.[3]
Silver cyanide
Sodium cyanide
Streptozotocin (D-Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-)
Strontium sulfide
Strychnine and salts (Strychnidin-10-one, and salts)
1,2,4,5-Tetrachlorobenzene (Benzene, 1,2,4,5-tetrachloro-)
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) (Dibenzo-p-dioxin, 2,3,7,8-tetrachloro-)
Tetrachloroethane, N.O.S.[3] (Ethane, tetrachloro-, N.O.S.[3])
1,1,1,2-Tetrachlorethane (Ethane, 1,1,1,2-tetrachloro-)

1,1,2,2-Tetrachlorethane (Ethane, 1,1,2,2-tetrachloro-)
Tetrachloroethane (Ethene, 1,1,2,2-tetrachloro-)
Tetrachloromethane (Carbon tetrachloride)
2,3,4,6,-Tetrachlorophenol (Phenol, 2,3,4,6 tetrachloro-)
Tetraethyldithiopyrophosphate (Dithiopyrophosphoric acid, tetraethyl-ester)
Tetraethyl lead (Plumbane, tetraethyl-)
Tetraethylpyrophosphate (Pyrophosphoric acide, tetraethyl ester)
Tetranitromethane (Methane, tetranitro-)
Thallium and compounds, N.O.S.[3]
Thallic oxide (Thallium (III) oxide)
Thallium (I) acetate (Acetic acid, thallium (I) salt)
Thallium (I) carbonate (Carbonic acid, dithallium (I) salt)
Thallium (I) chloride
Thallium (I) nitrate (Nitric acid, thallium (I) salt)
Thallium selenite
Thallium (I) sulfate (Sulfuric acid, thallium (I) salt)
Thioacetamide (Ethanethioamide)
Thiosemicarbazide (Hydrazinecarbothioamide)
Thiourea (Carbamide thio-)
Thiuram (Bis(dimethylthiocarbamoyl) disulfide)
Thorium and compounds, N.O.S.,[3] when producing thorium byproduct material
Toluene (Benzene, methyl-)
Toluenediamine (Diaminotoluene)
o-Toluidine hydrochloride (Benzenamine, 2-methyl-, hydrochloride)
Tolylene diisocyanate (Benzene, 1,3-diisocyanatomethyl-)
Toxaphene (Camphene, octachloro-)
Tribromomethane (Bromoform)
1,2,4-Trichlorobenzene (Benzene, 1,2,4-trichloro-)
1,1,1-Trichloroethane (Methyl chloroform)
1,1,2-Trichloroethane (Ethane, 1,1,2-trichloro-)
Trichloroethene (Trichloroethylene)
Trichloromethanethiol (Methanethiol, trichloro-)
Trichloromonofluoromethane (Methane, trichlorofluoro-)
2,4,5-Trichlorophenol (Phenol, 2,4,5-trichloro-)
2,4,6-Trichlorophenol (Phenol, 2,4,6-trichloro-)
2,4,5-Trichlorophenoxyacetic acid (2,4,5-T) (Acetic acid, 2,4,5-trichlorophenoxy-)
2,4,5-Trichlorophenoxypropionic acid (2,4,5-TP) (Silvex) (Propionoic acid, 2-(2,4,5-trichlorophenoxy)-)
Trichloropropane, N.O.S.[3] (Propane, trichloro-, N.O.S.[3])
1,2,3-Trichloropropane (Propane, 1,2,3-trichloro-)
O,O,O-Triethyl phosphorothioate (Phosphorothioic acid, O,O,O-triethyl ester)
sym-Trinitrobenzene (Benzene, 1,3,5-trinitro-)
Tris(1-azridinyl) phosphine sulfide (Phosphine sulfide, tris(1-aziridinyl-)
Tris(2,3-dibromopropyl) phosphate (1-Propanol, 2,3-dibromo-, phosphate)
Trypan blue (2,7-Naphthalenedisulfonic acid, 3,3′-[(3,3′-dimethyl (1,1′-biphenyl)-4,4′-diyl)bis(azo)]bis(5-amino-4-hydroxy-, tetrasodium salt)
Uracil mustard (Uracil 5-[bis(2-chloroethyl)amino]-)
Uranium and compounds, N.O.S.[3]
Vanadic acid, ammonium salt (ammonium vanadate)
Vanadium pentoxide (Vanadium (V) oxide)
Vinyl chloride (Ethene, chloro-)
Zinc cyanide
Zinc phosphide

[50 FR 41862, Oct. 16, 1985, as amended at 52 FR 31611, Aug. 21, 1987; 52 FR 43562, Nov 13, 1987; 53 FR 19248, May 27, 1988; 55 FR 45600, Oct. 30, 1990]

PART 50—DOMESTIC LICENSING OF PRODUCTION AND UTILIZATION FACILITIES

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AUTHORITY: Secs. 102, 103, 104, 105, 161, 182, 183, 186, 189, 68 Stat. 936, 937, 938, 948, 953, 954, 955, 956, as amended, sec. 234, 83 Stat. 1244, as amended (42 U.S.C. 2132, 2133, 2134, 2135, 2201, 2232, 2233, 2236, 2239, 2282); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

Section 50.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951 (42 U.S.C. 5851). Section 50.10 also issued under secs. 101, 185, 68 Stat. 936, 955, as amended (42 U.S.C 2131, 2235); sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.13, 50.54(dd) and 50.103 are also issued under sec. 108, 68 Stat. 939, as amended (42 U.S.C. 2138). Sections 50.23, 50.35, 50.55, and 50.56 also issued under sec. 185, 68 Stat. 955 (42 U.S.C. 2235). Sections 50.33a, 50.55a and Appendix Q also issued under sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.34 and 50.54 also issued under sec. 204, 88 Stat. 1245 (42 U.S.C. 5844). Sections 50.58, 50.91, and 50.92 also issued under Pub. L. 97-415, 96 Stat. 2073 (42 U.S.C. 2239). Section 50.78 also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Sections 50.80–50.81 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Appendix F also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273); §§ 50.46 (a) and (b), and 50.54(c) are issued under secs. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201(b); §§ 50.7(a), 50.10 (a)-(c), 50.34 (a) and (e), 50.44 (a)-(c), 50.46 (a) and (b), 50.47(b), 50.48 (a), (c), (d), and (e), 50.49(a), 50.54 (a), (i), (i)(1), (l)-(n), (p), (q), (t), (v), and (y), 50.55(f), 50.55a (a), (c)-(e), (g), and (h), 50.59(c), 50.60(a), 50.62(c), 50.64(b), and 50.80 (a) and (b) are issued under sec. 161i, 68 Stat. 949, as amended (42 U.S.C. 2201(i)); and §§ 50.49 (d), (h), and (j), 50.54 (w), (z), (bb), (cc), and (dd), 50.55(e), 50.59(b), 50.61(b), 50.62(b), 50.70(a), 50.71 (a)-(c) and (e), 50.72(a), 50.73 (a) and (b), 50.74, 50.78, and 50.90 are issued under sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

SOURCE: 21 FR 355, Jan. 19, 1956, unless otherwise noted.

GENERAL PROVISIONS

§ 50.1 Basis, purpose, and procedures applicable.

The regulations in this part are promulgated by the Nuclear Regulatory Commission pursuant to the Atomic Energy Act of 1954, as amended, (68

tat. 919) and Title II of the Energy
teorganization Act of 1974 (88 Stat.
242) to provide for the licensing of
roduction and utilization facilities.

40 FR 8788, Mar. 3, 1975]

50.2 Definitions.

As used in this part,

Act means the Atomic Energy Act of
954 (68 Stat. 919) including any
mendments thereto.

Alternate ac source means an alter-
ating current (ac) power source that
s available to and located at or nearby
nuclear power plant and meets the
ollowing requirements:

(1) Is connectable to but not normal-
y connected to the offsite or onsite
mergency ac power systems;

(2) Has minimum potential for
ommon mode failure with offsite
ower or the onsite emergency ac
ower sources;

(3) Is available in a timely manner
fter the onset of station blackout;
nd

(4) Has sufficient capacity and reli-
bility for operation of all systems re-
uired for coping with station black-
ut and for the time required to bring
nd maintain the plant in safe shut-
lown (non-design basis accident).

Atomic energy means all forms of
nergy released in the course of nucle-
r fission or nuclear transformation.

Atomic weapon means any device
tilizing atomic energy, exclusive of
he means for transporting or propel-
ng the device (where such means is a
eparable and divisible part of the
evice), the prinicipal purpose of
hich is for use as, or for development
f, a weapon, a weapon prototype, or a
eapon test device.

By-product material means any ra-
ioactive material (except special nu-
ear material) yielded in or made ra-
ioactive by exposure to the radiation
icident to the process of producing or
tilizing special nuclear material.

Commission means the Nuclear Reg-
latory Commission or its duly au-
horized representatives.

Common defense and security means
e common defense and security of
e United States.

Controls when used with respect to
uclear reactors means apparatus and
echanisms, the manipulation of which directly affects the reactivity or power level of the reactor.

Controls when used with respect to any other facility means apparatus and mechanisms, the manipulation of which could affect the chemical, physical, metallurgical, or nuclear process of the facility in such a manner as to affect the protection of health and safety against radiation.

Decommission means to remove (as a facility) safely from service and reduce residual radioactivity to a level that permits release of the property for unrestricted use and termination of license.

Department and *Department of Energy* means the Department of Energy established by the Department of Energy Organization Act (Pub. L. 95-91, 91 Stat. 565, 42 U.S.C. 7101 *et seq.*), to the extent that the department, or its duly authorized representatives, exercises functions formerly vested in the Atomic Energy Commission, its Chairman, members, officers and components and transferred to the U.S. Energy Research and Development Administration and to the Administrator thereof pursuant to sections 104(b), (c) and (d) of the Energy Reorganization Act of 1974 (Pub.L.93-438, 88 Stat. 1233 at 1237, 42 U.S.C. 5814) and retransferred to the Secretary of Energy pursuant to section 301(a) of the Department of Energy Organization Act (Pub. L. 95-91, 91 Stat. 565 at 577-578, 42 U.S.C. 7151).

Design bases means that information which identifies the specific functions to be performed by a structure, system, or component of a facility, and the specific values or ranges of values chosen for controlling parameters as reference bounds for design. These values may be (1) restraints derived from generally accepted "state of the art" practices for achieving functional goals, or (2) requirements derived from analysis (based on calculation and/or experiments) of the effects of a postulated accident for which a structure, system, or component must meet its functional goals.

Electric utility means any entity that generates or distributes electricity and which recovers the coat of this electricity, either directly or indirectly, through rates established by the entity itself or by a separate regulatory authority. Investor-owned utilities, including generation or distribution subsidiaries, public utility districts, municipalities, rural electric cooperatives, and State and Federal agencies, including associations of any of the foregoing, are included within the meaning of "electric utility."

Federal Government funding for conversion means funds appropriated to the Department of Energy or to any other Federal Agency to pay directly to or to reimburse non-power reactor licensees for costs attendant to conversion.

Fuel acceptable to the Commission means that the fuel replacing the existing HEU fuel in a specific non-power reactor (1) meets the operating requirements of the existing license or, through appropriate NRC safety review and approval, can be used in a manner which protects public health and safety and promotes the common defense and security; and (2) meets the Commission's policy of limiting, to the maximum extent possible, the use of HEU fuel in that reactor.

Government agency means any executive department, commission, independent establishment, corporation, wholly or partly owned by the United States of America which is an instrumentality of the United States, or any board, bureau, division, service, office, officer, authority, administration, or other establishment in the executive branch of the Government.

Highly enriched uranium (HEU) fuel means fuel in which the weight percent of U-235 in the uranium is 20% or greater. Target material, special instrumentation, or experimental devices using HEU are not included.

Low enriched uranium (LEU) fuel means fuel in which the weight percent of U-235 in the uranium is less than 20%.

Non-power reactor means a research or test reactor licensed under §§ 50.21(c) or 50.22 of this part for research and development.

Nuclear reactor means an apparatus, other than an atomic weapon, designed or used to sustain nuclear fission in a self-supporting chain reaction.

Person means (1) any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, government agency other than the Commission or the Department, except that the Department shall be considered a person to the extent that its facilities are subject to the licensing and related regulatory authority of the Commission pursuant to section 202 of the Energy Reorganization Act of 1974,[1] any State or any political subdivision of, or any political entity within a State, any foreign government or nation or any political subdivision of any such government or nation, or other entity; and (2) any legal successor, representative, agent, or agency of the foregoing.

Produce, when used in relation to special nuclear material, means (1) to manufacture, make, produce, or refine special nuclear material; (2) to separate special nuclear material from other substances in which such material may be contained; or (3) to make or to produce new special nuclear material.

Production facility means:

(1) Any nuclear reactor designed or used primarily for the formation of plutonium or uranium-233; or

(2) Any facility designed or used for the separation of the isotopes of uranium or the isotopes of plutonium, except laboratory scale facilities designed or used for experimental or analytical purposes only; or

(3) Any facility designed or used for the processing of irradiated materials containing special nuclear material, except (i) laboratory scale facilities de-

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[1] The Department facilities identified in section 202 are:

(1) Demonstration Liquid Metal Fast Breeder reactors when operated as part of the power generation facilities of an electric utility system, or when operated in any other manner for the purpose of demonstrating the suitability for commercial application of such a reactor.

(2) Other demonstration nuclear reactors, except those in existence on January 19, 1975, when operated as part of the power generation facilities of an electric utility system, or when operated in any other manner for the purpose of demonstrating the suitability for commercial application of such a reactor.

signed or used for experimental or analytical purposes, (ii) facilities in which the only special nuclear materials contained in the irradiated material to be processed are uranium enriched in the isotope U-235 and plutonium produced by the irradiation, if the material processed contains not more than 10^{-6} grams of plutonium per gram of U-235 and has fission product activity not in excess of 0.25 millicuries of fission products per gram of U-235, and (iii) facilities in which processing is conducted pursuant to a license issued under Parts 30 and 70 of this chapter, or equivalent regulations of an Agreement State, for the receipt, possession, use, and transfer of irradiated special nuclear material, which authorizes the processing of the irradiated material on a batch basis for the separation of selected fission products and limits the process batch to not more than 100 grams of uranium enriched in the isotope 235 and not more than 15 grams of any other special nuclear material.

Reactor coolant pressure boundary means all those pressure-containing components of boiling and pressurized water-cooled nuclear power reactors, such as pressure vessels, piping, pumps, and valves, which are:

(1) Part of the reactor coolant system, or

(2) Connected to the reactor coolant system, up to and including any and all of the following:

(i) The outermost containment isolation valve in system piping which penetrates primary reactor containment,

(ii) The second of two valves normally closed during normal reactor operation in system piping which does not penetrate primary reactor containment,

(iii) The reactor coolant system safety and relief valves.

For nuclear power reactors of the direct cycle boiling water type, the reactor coolant system extends to and includes the outermost containment isolation valve in the main steam and feedwater piping.

Research and development means (1) theoretical analysis, exploration, or experimentation; or (2) the extension of investigative findings and theories of a scientific or technical nature into practical application for experimental and demonstration purposes, including the experimental production and testing of models, devices, equipment, materials, and processes.

Restricted Data means all data concerning (1) design, manufacture, or utilization of atomic weapons; (2) the production of special nuclear material; or (3) the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the Restricted Data category pursuant to section 142 of the Act.

Safe shutdown (non-design basis accident (non-DBA)) for station blackout means bringing the plant to those shutdown conditions specified in plant technical specifications as Hot Standby or Hot Shutdown, as appropriate (plants have the option of maintaining the RCS at normal operating temperatures or at reduced temperatures).

Source material means source material as defined in subsection 11z. of the Act and in the regulations contained in Part 40 of this chapter.

Special nuclear material means (1) plutonium, uranium-233, uranium enriched in the isotope-233 or in the isotope-235, and any other material which the Commission, pursuant to the provisions of section 51 of the act, determines to be special nuclear material, but does not include source material; or (2) any material artificially enriched by any of the foregoing, but does not include source material.

Station blackout means the complete loss of alternating current (ac) electric power to the essential and nonessential switchgear buses in a nuclear power plant (i.e., loss of offsite electric power system concurrent with turbine trip and unavailability of the onsite emergency ac power system). Station blackout does not include the loss of available ac power to buses fed by station batteries through inverters or by alternate ac sources as defined in this section, nor does it assume a concurrent single failure or design basis accident. At single unit sites, any emergency ac power source(s) in excess of the number required to meet minimum redundancy requirements (i.e., single failure) for safe shutdown (non-DBA) is assumed to be available and may be designated as an alternate power source(s) provided the applicable requirements are met. At multiunit sites, where the combination of emergency ac power sources exceeds the minimum redundancy requirements for safe shutdown (non-DBA) of all units, the remaining emergency ac power sources may be used as alternate ac power sources provided they meet the applicable requirements. If these criteria are not met, station blackout must be assumed on all the units.

Testing facility means a nuclear reactor which is of a type described in § 50.21(c) of this part and for which an application has been filed for a license authorizing operation at:

(1) A thermal power level in excess of 10 megawatts; or

(2) A thermal power level in excess of 1 megawatt, if the reactor is to contain:

(i) A circulating loop through the core in which the applicant proposes to conduct fuel experiments; or

(ii) A liquid fuel loading; or

(iii) An experimental facility in the core in excess of 16 square inches in cross-section.

Unique purpose means a project, program, or commercial activity which cannot reasonably be accomplished without the use of HEU fuel, and may include: (1) A specific experiment, program, or commercial activity (typically long-term) that significantly serves the U.S. national interest and cannot be accomplished without the use of HEU fuel; (2) Reactor physics or reactor development based explicitly on the use of HEU fuel; (3) Research projects based on neutron flux levels or spectra attainable only with HEU fuel; or (4) A reactor core of special design that could not perform its intended function without using HEU fuel.

United States, when used in a geographical sense, includes Puerto Rico and all territories and possessions of the United States.

Utilization facility means any nuclear reactor other than one designed or used primarily for the formation of plutonium or U-233.

NOTE: Pursuant to subsections 11v. and 11cc., respectively, of the Act, the Commission may from time to time add to, or otherwise alter, the foregoing definitions of production and utilization facility. It may also include as a facility an important component part especially designed for a facility, but has not at this time included any component parts in the definitions.

[21 FR 355, Jan. 19, 1956, as amended at 25 FR 1072, Feb. 6, 1960; 26 FR 4990, June 6, 1961; 28 FR 3196, Apr. 3, 1963; 31 FR 15145, Dec. 2, 1966; 33 FR 18611, Dec. 17, 1968; 36 FR 11424, June 12, 1971]

EDITORIAL NOTE: For additional FEDERAL REGISTER citations affecting § 50.2, see the List of CFR Sections Affected in the Finding Aids section of this volume.

§ 50.3 Interpretations.

Except as specifically authorized by the Commission in writing, no interpretation of the meaning of the regulations in this part by any officer or employee of the Commission other than a written interpretation by the General Counsel will be recognized to be binding upon the Commission.

§ 50.4 Written communications.

(a) *Address requirements.* The signed original of all correspondence, reports, applications, and other written communications from the applicant or licensee to the Nuclear Regulatory Commission concerning the regulations in this part or individual license conditions must be addressed to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555.

(b) *Distribution requirements.* Copies of all correspondence, reports, and other written communications concerning the regulations in this part or individual license conditions must be submitted to the Nuclear Regulatory Commission at the locations and in the quantities set forth below (addresses for the NRC Regional Offices are listed in Appendix D of Part 20 of this chapter).

(1) *Applications for amendment of permits and licenses; reports; and other communications.* All written communications (including responses to: generic letters, bulletins, information notices, inspection reports, and miscellaneous requests for additional information), that are required of holders of operating licenses or con-

struction permits issued pursuant to this part, must be submitted as follows, except as otherwise specified in paragraphs (b)(2) through (b)(7) of this section: the signed original to the Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, one copy to the appropriate Regional Office, and one copy to the appropriate NRC Resident Inspector, if one has been assigned to the site of the facility.

(2) *Applications for permits and licenses, and amendments to applications.* Applications for construction permits, applications for operating licenses and amendments to either type of application must be submitted as follows, except as otherwise specified in paragraphs (b)(3) through (b)(7) of this section.

(i) Applications for licenses for facilities described in § 50.21 (a) and (c) and amendments to these applications: The signed original must be sent to the Nuclear Regulatory Commission. Document Control Desk, Washington, DC 20555 and one copy to the appropriate Regional Office.

(ii) Applications for permits and licenses for facilities described in § 50.21(b) or § 50.22, and amendments to these applications: the signed original and 37 copies must be sent to the Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, one copy to the appropriate Regional Office, and one copy to the appropriate NRC Resident Inspector, if one has been assigned to the site of the facility.

(3) *Acceptance review application.* Written communications required for an application for determination of suitability for docketing pursuant to § 50.30(a)(6) must be submitted as follows: the signed original and 13 copies to the Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555 and one copy to the appropriate Regional Office.

(4) *Security plan and related submittals.* Written communications, as defined in paragraphs (b)(4)(i) through (iv) of this section must be submitted as follows: The signed original and three copies to the Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, and two copies to the appropriate Regional Office;

(i) Physical security plan pursuant to § 50.34;

(ii) Safeguards contingency plan pursuant to § 50.34;

(iii) Change to security plan, guard training and qualification plan, or safeguards contingency plan made without prior Commission approval pursuant to § 50.54(p);

(iv) Application for amendment of physical security plan, guard training and qualification plan, or safeguards contingency plan pursuant to § 50.90.

(5) *Emergency plan and related submittals.* Written communications as defined in paragraphs (b)(5)(i) through (iii) in this section, must be submitted as follows: the signed original to the Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, two copies to the appropriate Regional Office, and one copy to the appropriate NRC Resident Inspector if one has been assigned to the site of the facility.

(i) Emergency plan pursuant to § 50.34;

(ii) Change to an emergency plan pursuant to § 50.54(q);

(iii) Emergency implementing procedures pursuant to Appendix E.V of this part.

(6) *Updated FSAR.* An updated Final Safety Analysis Report (FSAR) or replacement pages, pursuant to § 50.71(e) must be submitted as follows: the signed original and 10 copies to the Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, one copy to the appropriate Regional Office, and one copy to the appropriate NRC Resident Inspector if one has been assigned to the site of the facility.

(7) *Quality assurance related submittals.* (i) A change to the Safety Analysis Report quality assurance program description pursuant to § 50.54(a)(3) or § 50.55(f)(3), or a change to a licensee's NRC-accepted quality assurance topical report pursuant to § 50.54(a)(3) or § 50.55(f)(3), must be submitted as follows: the signed original to the Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, one copy to the appropriate Regional Office,

and one copy to the appropriate NRC Resident Inspector if one has been assigned to the site of the facility.

(ii) A change to an NRC-accepted quality assurance topical report from nonlicensees (i.e., architect/engineers, NSSS suppliers, fuel suppliers, constructors, etc.) must be submitted as follows: one signed original to the Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555.

(c) *Form of communications.* All copies submitted to meet the requirements set forth in paragraph (b) of this section must be typewritten, printed or otherwise reproduced in permanent form on unglazed paper. Exceptions to these requirements may be granted for the submittal of micrographic, photographic, or electronic forms. Prior to making any submittal in other than paper form, the applicant or licensee must contact the Division of Information Support Services, Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 492-8304, to obtain specifications, copy requirements, and prior approval.

(d) *Delivery of communications.* Written communications may be delivered to the Document Control Desk at 11555 Rockville Pike, Rockville, Maryland between the hours of 8:15 a.m. and 4:00 p.m. Eastern Time. If a submittal due date falls on Saturday, Sunday, or Federal holiday, the next Federal working day becomes the official due date.

(e) *Regulation governing submission.* Licensees and applicants submitting correspondence, reports, and other written communications pursuant to the regulations of this part are requested but not required to cite whenever practical, in the upper right corner of the first page of the submittal, the specific regulation or other basis, requiring submission.

(f) *Conflicting requirements.* The communications requirements contained in this section and §§ 50.12, 50.30, 50.36, 50.36a, 50.44, 50.49, 50.54, 50.55, 50.55a, 50.59, 50.62, 50.71, 50.73, 50.82, 50.90, and 50.91 supersede and replace all existing requirements in any license conditions or technical specifications in effect on January 5, 1987. Exceptions to these requirements must be approved by the Division of Information Support Services, Nuclear Regulatory Commission, Washington, DC 20555, Telephone (301) 492-8304.

[51 FR 40306, Nov. 6, 1986, as amended at 52 FR 31611, Aug. 21, 1987; 53 FR 6139, Mar. 1, 1988]

§ 50.7 Employee protection.

(a) Discrimination by a Commission licensee, permittee, an applicant for a Commission license or permit, or a contractor or subcontractor of a Commission licensee, permittee, or applicant against an employee for engaging in certain protected activities is prohibited. Discrimination includes discharge and other actions that relate to compensation, terms, conditions, and privileges of employment. The protected activities are established in section 210 of the Energy Reorganization Act of 1974, as amended, and in general are related to the administration or enforcement of a requirement imposed under the Atomic Energy Act or the Energy Reorganization Act.

(1) The protected activities include but are not limited to:

(i) Providing the Commission information about possible violations of requirements imposed under either of the above statutes;

(ii) Requesting the Commission to institute action against his or her employer for the administration or enforcement of these requirements; or

(iii) Testifying in any Commission proceeding.

(2) These activities are protected even if no formal proceeding is actually initiated as a result of the employee assistance or participation.

(3) This section has no application to any employee alleging discrimination prohibited by this section who, acting without direction from his or her employer (or the employer's agent), deliberately causes a violation of any requirement of the Energy Reorganization Act of 1974, as amended, or the Atomic Energy Act of 1954, as amended.

(b) Any employee who believes that he or she has been discharged or otherwise discriminated against by any person for engaging in the protected activities specified in paragraph (a)(1) of this section may seek a remedy for the discharge or discrimination through an administrative proceeding in the Department of Labor. The administrative proceeding must be initiated within 30 days after an alleged violation occurs by filing a complaint alleging the violation with the Department of Labor, Employment Standards Administration, Wage and Hour Division. The Department of Labor may order reinstatement, back pay, and compensatory damages.

(c) A violation of paragraph (a) or paragraph (f) of this section by a Commission licensee, an applicant for a Commission license, or a contractor or subcontractor of a Commission licensee or applicant may be grounds for—

(1) Denial, revocation, or suspension of the license.

(2) Imposition of a civil penalty on the licensee or applicant.

(3) Other enforcement action.

(d) Actions taken by an employer, or others, which adversely affect an employee may be predicated upon nondiscriminatory grounds. The prohibition applies when the adverse action occurs because the employee has engaged in protected activities. An employee's engagement in protected activities does not automatically render him or her immune from discharge or discipline for legitimate reasons or from adverse action dictated by nonprohibited considerations.

(e) Each licensee, permittee and each applicant shall post Form NRC-3, "Notice to Employees," on its premises. Posting must be at locations sufficient to permit employees protected by this section to observe a copy on the way to or from their place of work. Premises must be posted not later than 30 days after an application is docketed and remain posted while the application is pending before the Commission, during the term of the license, and for 30 days following license termination.

NOTE: Copies of Form NRC-3 may be obtained by writing to the Regional Administrator of the appropriate U.S. Nuclear Regulatory Commission Regional Office listed in Appendix D, Part 20 of this chapter.

(f) No agreement affecting the compensation, terms, conditions and privileges of employment, including an agreement to settle a complaint filed by an employee with the Department of Labor pursuant to section 210 of the Energy Reorganization Act of 1974, may contain any provision which would prohibit, restrict, or otherwise discourage, an employee from participating in protected activity as defined in paragraph (a)(1) of this section, including, but not limited to, providing information to the NRC on potential violations or other matters within NRC's regulatory responsibilities.

[47 FR 30456, July 14, 1982, as amended at 52 FR 31611, Aug. 21, 1987; 55 FR 10404, Mar. 21, 1990]

§ 50.8 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). OMB has approved the information collection requirements contained in this part under control number 3150-0011.

(b) The approved information collection requirements contained in this part appear in §§ 50.30, 50.33, 50.33a, 50.34, 50.34a, 50.35, 50.36, 50.36a, 50.48, 50.49, 50.54, 50.55, 50.55a, 50.59, 50.60, 50.63, 50.64, 50.71, 50.72, 50.80, 50.82, 50.90, 50.91, and Appendixes A, B, E, G, H, J, K, M, N, and R.

(c) This part contains information collection requirements in addition to those approved under the control number specified in paragraph (a) of this section. These information collection requirements and the control numbers under which they are approved are as follows:

(1) In § 50.73, Form NRC-366 is approved under control number 3150-0104.

(2) In § 50.78, Form N-71 is approved under control number 3150-0056.

[49 FR 19627, May 9, 1984, as amended at 51 FR 6519, Feb. 25, 1986; 53 FR 23215, June 21, 1988]

§ 50.9 Completeness and accuracy of information.

(a) Information provided to the Commission by an applicant for a license or by a licensee or information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.

(b) Each applicant or licensee shall notify the Commission of information identified by the applicant or licensee as having for the regulated activity a significant implication for public health and safety or common defense and security. An applicant or licensee violates this paragraph only if the applicant or licensee fails to notify the Commission of information that the applicant or licensee has identified as having a significant implication for public health and safety or common defense and security. Notification shall be provided to the Administrator of the appropriate Regional Office within two working days of identifying the information. This requirement is not applicable to information which is already required to be provided to the Commission by other reporting or updating requirements.

[52 FR 49372, Dec. 31, 1987]

REQUIREMENT OF LICENSE, EXCEPTIONS

§ 50.10 License required.

(a) Except as provided in § 50.11, no person within the United States shall transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, possess, or use any production or utilization facility except as authorized by a license issued by the Commission.

(b) No person shall begin the construction of a production or utilization facility on a site on which the facility is to be operated until a construction permit has been issued. As used in this paragraph, the term "construction" shall be deemed to include pouring the foundation for, or the installation of, any portion of the permanent facility on the site, but does not include:

(1) Site exploration, site excavation, preparation of the site for construction of the facility, including the driving of piles, and construction of roadways, railroad spurs, and transmission lines;

(2) Procurement or manufacture of components of the facility;

(3) Construction of non-nuclear facilities (such as turbogenerators and turbine buildings) and temporary buildings (such as construction equipment storage sheds) for use in connection with the construction of the facility; and

(4) With respect to production or utilization facilities, other than testing facilities, required to be licensed pursuant to section 104a or section 104c of the Act, the construction of buildings which will be used for activities other than operation of a facility and which may also be used to house a facility. (For example, the construction of a college laboratory building with space for installation of a training reactor is not affected by this paragraph. This paragraph does not apply to production or utilization facilities subject to paragraph (c) of this section.

(c) Notwithstanding the provisions of paragraph (b) of this section, and subject to paragraphs (d) and (e) of this section, no person shall effect commencement of construction of a production or utilization facility subject to the provisions of § 51.20(b) of this chapter on a site on which the facility is to be operated until a construction permit has been issued. As used in this paragraph, the term "commencement of construction" means any clearing of land, excavation or other substantial action that would adversely affect the environment of a site, but does not mean:

(1) Changes desirable for the temporary use of the land for public recreational uses, necessary borings to determine foundation conditions or other preconstruction monitoring to establish background information related to the suitability of the site or to the protection of environmental values;

(2) Procurement or manufacture of components of the facility; and

(3) With respect to production or utilization facilities, other than testing facilities, required to be licensed pursuant to section 104a or section 104c of the Act, the construction of buildings

which will be used for activities other than operation of a facility and which may also be used to house a facility. (For example, the construction of a college laboratory building with space for installation of a training reactor is not affected by this paragraph.)

(d)(1) Each person subject to the provisions of paragraph (c) of this section, who is, on March 21, 1972, conducting activities permitted pursuant to paragraph (b) of this section in effect prior to March 21, 1972, may furnish to the Commission within 30 days after March 21, 1972 or such later date as may be approved by the Commission upon good cause shown, a written statement of any reasons, with supporting factual submission, why, with reference to the factors stated in paragraph (d)(2) of this section, the activities should be continued, pending the issuance of a construction permit, notwithstanding the provisions of paragraph (c) of this section. If such written statement has been submitted, within the time specified, such activities may continue to be conducted pending Commission action pursuant to paragraph (d)(2) of this section.

(2) Upon submission of a statement of reasons pursuant to paragraph (d)(1) of this section the Commission may authorize the continued conduct of activities permitted by paragraph (b) of this section in effect prior to March 21, 1972, upon consideration and balancing of the following factors:

(i) Whether continuation of the activities will give rise to a significant adverse impact on the environment and the nature and extent of such impact, if any;

(ii) Whether redress of any adverse environmental impact from continuation of the activities can reasonably be effected should such redress be necessary;

(iii) Whether continuation of the activities would foreclose subsequent adoption of alternatives; and

(iv) The effect of delay in conducting such activities on the public interest, including the power needs to be served by the proposed facility, the availability of alternative sources, if any, to meet those needs on a timely basis, and delay costs to the applicant and to consumers.

(3) Activities permitted to be continued pursuant to this paragraph (d) shall be conducted in such a manner as will minimize or reduce their environmental impact.

(e)(1) The Director of Nuclear Reactor Regulation may authorize an applicant for a construction permit for a utilization facility which is subject to § 51.20(b) of this chapter, and is of the type specified in § 50.21(b) (2) or (3) or § 50.22 or is a testing facility to conduct the following activities: (i) Preparation of the site for construction of the facility (including such activities as clearing, grading, construction of temporary access roads and borrow areas); (ii) installation of temporary construction support facilities (including such items as warehouse and shop facilities, utilities, concrete mixing plants, docking and unloading facilities, and construction support buildings); (iii) excavation for facility structures; (iv) construction of service facilities (including such facilities as roadways, paving, railroad spurs, fencing, exterior utility and lighting systems, transmission lines, and sanitary sewerage treatment facilities); and (v) the construction of structures, systems and components which do not prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public. No such authorization shall be granted unless the staff has completed a final environmental impact statement on the issuance of the construction permit as required by Subpart A of Part 51 of this chapter.

(2) Such an authorization shall be granted only after the presiding officer in the proceeding on the construction permit application (i) has made all the findings required by §§ 51.104(b) and 51.105 of this chapter to be made prior to issuance of the construction permit for the facility, and (ii) has determined that, based upon the available information and review to date, there is reasonable assurance that the proposed site is a suitable location for a reactor of the general size and type proposed from the standpoint of radiological health and safety considerations under the Act and rules and regulations promul-

gated by the Commission pursuant thereto.

(3)(i) The Director of Nuclear Reactor Regulation may authorize an applicant for a construction permit for a utilization facility which is subject to § 51.20(b) of this chapter, and is of the type specified in § 50.21(b) (2) or (3) or § 50.22 or is a testing facility to conduct, in addition to the activities described in paragraph (e)(1) of this section, the installation of structural foundations, including any necessary subsurface preparation, for structures, systems and components which prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public.

(ii) Such an authorization, which may be combined with the authorization described in paragraph (e)(1) of this section, or may be granted at a later time, shall be granted only after the presiding officer in the proceeding on the construction permit application has, in addition to making the findings and determinations required by paragraph (e)(2) of this section, determined that there are no unresolved safety issues relating to the additional activities that may be authorized pursuant to this paragraph that would constitute good cause for withholding authorization.

(4) Any activities undertaken pursuant to an authorization granted under this paragraph shall be entirely at the risk of the applicant and, except as to matters determined under paragraphs (e)(2) and (e)(3)(ii), the grant of the authorization shall have no bearing on the issuance of a construction permit with respect to the requirements of the Act, and rules, regulations, or orders promulgated pursuant thereto.

[21 FR 355, Jan. 19, 1956, as amended at 25 FR 8712, Sept. 9, 1960; 33 FR 2381, Jan. 31, 1968; 35 FR 11460, July 7, 1970; 37 FR 5748, Mar. 21, 1972; 39 FR 14508, Apr. 24, 1974; 39 FR 26279, July 18, 1974; 39 FR 33202, Sept. 16, 1974; 43 FR 6924, Feb. 17, 1978; 49 FR 9403, Mar. 12, 1984]

§ 50.11 Exceptions and exemptions from licensing requirements.

Nothing in this part shall be deemed to require a license for:

(a) The manufacture, production,
acquisition by the Department of D
fense of any utilization facility autho
ized pursuant to section 91 of the Ac
or the use of such facility by the D
partment of Defense or by a perso
under contract with and for the a
count of the Department of Defense;

(b) Except to the extent that Admi
istration facilities of the types subje
to licensing pursuant to section 202
the Energy Reorganization Act
1974 [2] are involved;

(1)(i) The processing, fabrication
refining of special nuclear material
the separation of special nuclear mat
rial, or the separation of special nucl
ar material from other substances by
prime contractor of the Departmen
under a prime contract for:

(A) The performance of work for th
Department at a United States gover
ment-owned or controlled site;

(B) Research in, or developmen
manufacture, storage, testing or trans
portation of, atomic weapons or com
ponents thereof; or

(C) The use or operation of a pro
duction or utilization facility in
United States owned vehicle or vesse
or

(ii) By a prime contractor or subcon
tractor of the Commission or the De
partment under a prime contract
subcontract when the Commission de
termines that the exemption of th
prime contractor or subcontractor
authorized by law; and that, under th
terms of the contract or subcontrac
there is adequate assurance that th
work thereunder can be accomplishe

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[2] The Department facilities identified
section 202 are:

(1) Demonstration Liquid Metal Fa
Breeder reactors when operated as part
the power generation facilities of an electr
utility system, or when operated in an
other manner for the purpose of demo
strating the suitability for commercial a
plication of such a reactor.

(2) Other demonstration nuclear reacto
except those in existence on January 1
1975, when operated as part of the pow
generation facilities of an electric utili
system, or when operated in any oth
manner for the purpose of demonstrati
the suitability for commercial application
such a reactor.

without undue risk to the public health and safety;

(2)(i) The construction or operation of a production or utilization facility for the Department at a United States government-owned or controlled site, including the transportation of the production or utilization facility to or from such site and the performance of contract services during temporary interruptions of such transportation; or the construction or operation of a production or utilization facility for the Department in the performance of research in, or development, manufacture, storage, testing, or transportation of, atomic weapons or components thereof; or the use or operation of a production or utilization facility for the Department in a United States government-owned vehicle or vessel: *Provided*, That such activities are conducted by a prime contractor of the Department under a prime contract with the Department.

(ii) The construction or operation of a production or utilization facility by a prime contractor or subcontractor of the Commission or the Department under his prime contract or subcontract when the Commission determines that the exemption of the prime contractor or subcontrator is authorized by law; and that, under the terms of the contract or subcontract, there is adequate assurance that the work thereunder can be accomplished without undue risk to the public health and safety.

(c) The transportation or possession of any production or utilization facility by a common or contract carrier or warehousemen in the regular course of carriage for another or storage incident thereto.

[40 FR 8788, Mar. 3, 1975]

§ 50.12 Specific exemptions.

(a) The Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of the regulations of this part, which are—

(1) Authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security.

(2) The Commission will not consider granting an exemption unless special circumstances are present. Special circumstances are present whenever—

(i) Application of the regulation in the particular circumstances conflicts with other rules or requirements of the Commission; or

(ii) Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule; or

(iii) Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated; or

(iv) The exemption would result in benefit to the public health and safety that compensates for any decrease in safety that may result from the grant of the exemption; or

(v) The exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation; or

(vi) There is present any other material circumstance not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If such condition is relied on exclusively for satisfying paragraph (a)(2) of this section, the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.

(b) Any person may request an exemption permitting the conduct of activities prior to the issuance of a construction permit prohibited by § 50.10. The Commission may grant such an exemption upon considering and balancing the following factors:

(1) Whether conduct of the proposed activities will give rise to a significant adverse impact on the environment and the nature and extent of such impact, if any;

(2) Whether redress of any adverse environment impact from conduct of the proposed activities can reasonably be effected should such redress be necessary;

(3) Whether conduct of the proposed activities would foreclose subsequent adoption of alternatives; and

(4) The effect of delay in conducting such activities on the public interest, including the power needs to be used by the proposed facility, the availability of alternative sources, if any, to meet those needs on a timely basis and delay costs to the applicant and to consumers.

Issuance of such an exemption shall not be deemed to constitute a commitment to issue a construction permit. During the period of any exemption granted pursuant to this paragraph (b), any activities conducted shall be carried out in such a manner as will minimize or reduce their environmental impact.

[37 FR 5748, Mar. 21, 1972, as amended at 40 FR 8789, Mar. 3, 1975; 50 FR 50777, Dec. 12, 1985]

§ 50.13 Attacks and destructive acts by enemies of the United States; and defense activities.

An applicant for a license to construct and operate a production or utilization facility, or for an amendment to such license, is not required to provide for design features or other measures for the specific purpose of protection against the effects of (a) attacks and destructive acts, including sabotage, directed against the facility by an enemy of the United States, whether a foreign government or other person, or (b) use or deployment of weapons incident to U.S. defense activities.

[32 FR 13445, Sept. 26, 1967]

CLASSIFICATION AND DESCRIPTION OF LICENSES

§ 50.20 Two classes of licenses.

Licenses will be issued to named persons applying to the Commission therefor, and will be either class 104 or class 103.

§ 50.21 Class 104 licenses; for medical therapy and research and development facilities.

A class 104 license will be issued, to an applicant who qualifies, for any one or more of the following: to transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, possess, or use.

(a) A utilization facility for use in medical therapy; or

(b)(1) A production or utilization facility the construction or operation of which was licensed pursuant to subsection 104b of the Act prior to December 19, 1970;

(2) A production or utilization facility for industrial or commercial purposes constructed or operated under an arrangement with the Administration entered into under the Cooperative Power Reactor Demonstration Program, except as otherwise specifically required by applicable law; and

(3) A production or utilization facility for industrial or commercial purposes, when specifically authorized by law.

(c) A production or utilization facility, which is useful in the conduct of research and development activities of the types specified in section 31 of the Act, and which is not a facility of the type specified in paragraph (b) of this section or in § 50.22.

[21 FR 355, Jan. 19, 1956, as amended at 31 FR 15145 Dec. 2, 1966; 35 FR 19659, Dec. 29, 1970; 38 FR 11446, May 8, 1973; 43 FR 6924, Feb. 17, 1978]

§ 50.22 Class 103 licenses; for commercial and industrial facilities.

A class 103 license will be issued, to an applicant who qualifies, for any one or more of the following: To transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, possess, or use a production or utilization facility for industrial or commercial purposes; *Provided, however*, That in the case of a production or utilization facility which is useful in the conduct of research and development activities of the types specified in section 31 of the Act, such facility is deemed to be for industrial or commercial purposes if the facility is to be used so that more than 50 percent of the annual cost of owning and operating the facility is devoted to the production of materials, products, or energy for sale or commercial distribution, or to the sale of services, other than research and development or education or training.

[38 FR 11446, May 8, 1973, as amended at 43 FR 6924, Feb. 17, 1978]

§ 50.23 Construction permits.

A construction permit for the construction of a production or utilization facility will be issued prior to the issuance of a license if the application is otherwise acceptable, and will be converted upon due completion of the facility and Commission action into a license as provided in § 50.56 of this part. A construction permit for the alteration of a production or utilization facility will be issued prior to the issuance of an amendment of a license, if the application for amendment is otherwise acceptable, as provided in § 50.91.

[21 FR 355, June 19, 1956, as amended at 35 FR 11461, July 17, 1970]

APPLICATIONS FOR LICENSES, FORM, CONTENTS, INELIGIBILITY OF CERTAIN APPLICANTS

§ 50.30 Filing of application for licenses; oath or affirmation.

(a) *Serving of applications.* (1) Each filing of an application for a license to construct and/or operate a production or utilization facility (including amendments to the applications) must be submitted to the U.S. Nuclear Regulatory Commission in accordance with § 50.4.

(2) An additional 10 copies of the general information and 30 copies of the safety analysis report, or part thereof or amendment thereto, must be retained by the applicant for distribution in accordance with the written instructions of the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as appropriate.

(3) Each applicant shall, upon notification by the Atomic Safety and Licensing Board appointed to conduct the public hearing required by the Atomic Energy Act for the issuance of a construction permit, update the application and serve the updated copies of the application or parts of it, eliminating all superseded information, together with an index of the updated application, as directed by the Atomic Safety and Licensing Board. In addition, at that time the applicant shall serve a copy of the updated application on the Atomic Safety and Licensing Appeal Panel. Any subsequent amendment to the application must be served on those served copies of the application and must be submitted to the U.S. Nuclear Regulatory Commission as specified in § 50.4.

(4) The applicant must make a copy of the updated application available at the public hearing for the use of any other parties to the proceeding, and shall certify that the updated copies of the application contain the current contents of the application submitted in accordance with the requirements of this part.

(5) At the time of filing an application, the Commission will establish a Local Public Document Room near the site of the proposed facility, for the use of the public, where a copy of the application, subsequent amendments, and other records pertinent to the facility will be available for public inspection and copying.

(6) The serving of copies required by this section must not occur until the application has been docketed pursuant to § 2.101(a) of this chapter. Copies must be submitted to the Commission, as specified in § 50.4, to enable the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as appropriate, to determine whether the application is sufficiently complete to permit docketing.

(b) *Oath or affirmation.* Each application for a license, including whenever appropriate a construction permit, or amendment of it, and each amendment of each application must be executed in a signed original by the applicant or duly authorized officer thereof under oath or affirmation.

(c)—[Reserved]

(d) *Application for operating licenses.* The holder of a construction permit for a production or utilization facility shall, at the time of submission of the final safety analysis report, file an application for an operating license or an amendment to an application for a license to construct and operate a production or utilization facility for the issuance of an operating license, as appropriate. The application or amendment shall state the name of the applicant, the name, location and power level, if any, of the facility and the time when the facility is expected to be ready for operation, and may incorporate by reference any pertinent information submitted in accordance with § 50.33 with the application for a construction permit.

(e) *Filing fees.* Each application for a production or utilization facility license, including, whenever appropriate, a construction permit, other than a license exempted from Part 170 of this chapter, shall be accompanied by the fee prescribed in Part 170 of this chapter. No fee will be required to accompany an application for renewal, amendment or termination of a construction permit or operating license, except as provided in § 170.21 of this chapter.

(f) *Environmental report.* An application for a construction permit or an operating license for a nuclear power reactor, testing facility, fuel reprocessing plant, or such other production or utilization facility whose construction or operation may be determined by the Commission to have a significant impact on the environment shall be accompanied by any Environmental Report required pursuant to Subpart A of Part 51 of this chapter.

[23 FR 3115, May 10, 1958, as amended at 33 FR 10924, Aug. 1, 1968; 34 FR 6307, Apr. 3, 1969; 35 FR 19660, Dec. 29, 1970; 37 FR 5749, Mar. 21, 1972; 51 FR 40307, Nov 6, 1986]

§ 50.31 Combining applications.

An applicant may combine in one his several applications for different kinds of licenses under the regulations in this chapter.

§ 50.32 Elimination of repetition.

In his application, the applicant may incorporate by reference information contained in previous applications, statements or reports filed with the Commission: *Provided,* That such references are clear and specific.

§ 50.33 Contents of applications; general information.

Each application shall state:

(a) Name of applicant;

(b) Address of applicant;

(c) Description of business or occupation of applicant;

(d)(1) If applicant is an individual, state citizenship.

(2) If applicant is a partnership, state name, citizenship and address of each partner and the principal location where the partnership does business.

(3) If applicant is a corporation or an unincorporated association, state:

(i) The state where it is incorporated or organized and the principal location where it does business;

(ii) The names, addresses and citizenship of its directors and of its principal officers;

(iii) Whether it is owned, controlled, or dominated by an alien, a foreign corporation, or foreign government, and if so, give details.

(4) If the applicant is acting as agent or representative of another person in filing the application, identify the principal and furnish information required under this paragraph with respect to such principal.

(e) The class of license applied for, the use to which the facility will be put, the period of time for which the license is sought, and a list of other licenses, except operator's licenses, issued or applied for in connection with the proposed facility.

(f) Except for an electric utility applicant for a license to operate a utilization facility of the type described in § 50.21(b) or § 50.22, information sufficient to demonstrate to the Commission the financial qualification of the applicant to carry out, in accordance with regulations in this chapter, the activities for which the permit or license is sought. As applicable, the following should be provided:

(1) If the application is for a construction permit, the applicant shall submit information that demonstrates that the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated construction costs and related fuel cycle costs. The applicant shall submit estimates of the total construction costs of the facility and related fuel cycle costs, and shall indicate the source(s) of funds to cover these costs.

(2) If the application is for an operating license, the applicant shall submit information that demonstrates the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated operation costs for the period of the license. The applicant shall submit estimates for total annual operating costs for each of the first five years of operation of the facility. The applicant shall also indicate the source(s) of funds to cover these costs. An application to renew or extend the term of an operating license must include the same financial information as is required in an application for an initial license.

(3) Each application for a construction permit or an operating license submitted by a newly-formed entity organized for the primary purpose of constructing or operating a facility must also include information showing:

(i) The legal and financial relationships it has or proposes to have with its stockholders or owners;

(ii) Its financial ability to meet any contractual obligation to the entity which they have incurred or proposed to incur; and

(iii) Any other information considered necessary by the Commission to enable it to determine the applicant's financial qualification.

(4) The Commission may request an established entity or newly-formed entity to submit additional or more detailed information respecting its financial arrangements and status of funds if the Commission considers this information appropriate. This may include information regarding a licensee's ability to continue the conduct of the activities authorized by the license and to decommission the facility.

(g) If the application is for an operating license for a nuclear power reactor, the applicant shall submit radiological emergency response plans of State and local governmental entities in the United States that are wholly or partially within the plume exposure pathway Emergency Planning Zone (EPZ)[3], as well as the plans of State governments wholly or partially within the ingestion pathway EPZ.[4] Generally, the plume exposure pathway EPZ for nuclear power reactors shall consist of an area about 10 miles (16 km) in radius and the ingestion pathway EPZ shall consist of an area about 50 miles (80 km) in radius. The exact size and configuration of the EPZs surrounding a particular nuclear power reactor shall be determined in relation to the local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries. The size of the EPZs also may be determined on a case-by-case basis for gas-cooled reactors and for reactors with an authorized power level less than 250 MW thermal. The plans for the ingestion pathway shall focus on such actions as are appropriate to protect the food ingestion pathway.

(h) If the applicant proposes to construct or alter a production or utilization facility, the application shall state the earliest and latest dates for completion of the construction or alteration.

(i) If the proposed activity is the generation and distribution of electric energy under a class 103 license, a list of the names and addresses of such regulatory agencies as may have jurisdiction over the rates and services incident to the proposed activity, and a list of trade and news publications which circulate in the area where the proposed activity will be conducted and which are considered appropriate to give reasonable notice of the application to those municipalities, private utilities, public bodies, and cooperatives, which might have a potential interest in the facility.

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[3] Emergency Planning Zones (EPZs) are discussed in NUREG-0396, EPA 520/1-78-016, "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light-Water Nuclear Power Plants," December 1978.

[4] If the State and local emergency response plans have been previously provided to the NRC for inclusion in the facility docket, the applicant need only provide the appropriate reference to meet this requirement.

(j) If the application contains Restricted Data or other defense information, it shall be prepared in such manner that all Restricted Data and other defense information are separated from the unclassified information.

(k) (1) For an application for an operating license for a production or utilization facility, information in the form of a report, as described in § 50.75 of this part, indicating how reasonable assurance will be provided that funds will be available to decommission the facility.

(2) On or before July 26, 1990, each holder of an operating license for a production or utilization facility in effect on July 27, 1990, shall submit information in the form of a report as described in § 50.75 of this part, indicating how reasonable assurance will be provided that funds will be available to decommission the facility.

[21 FR 355, Jan. 19, 1956, as amended at 35 FR 19660, Dec. 29, 1970; 38 FR 3956, Feb. 9, 1973; 45 FR 55408, Aug. 19, 1980; 49 FR 35752, Sept. 12, 1984; 53 FR 24049, June 27, 1988]

§ 50.33a Information requested by the Attorney General for antitrust review.

(a)(1) An applicant for a construction permit for a nuclear power reactor shall submit the information requested by the Attorney General as described in Appendix L to this part, if the application is for a class 103 permit and if the applicant has electrical generating capacity exceeding 1400 MW(e).

(2) An applicant for a construction permit for a nuclear power reactor shall submit the information requested by the Attorney General as described in paragraph 9 of Section II of Appendix L if the applicant has electrical generating capacity exceeding 200 MW(e) but no more than 1400 MW(e). Upon request of the Commission, the applicant shall furnish the other information described in Appendix L.

(3) An applicant for a construction permit for a nuclear power reactor is not required to submit the information described in Appendix L unless specifically requested by the Commission to provide the information, if the applicant has electrical generating capacity of 200 MW(e) or less.

(4) The information described in paragraphs (a)(1) and (2) of this section shall be submitted as a separate document prior to any other part of the license application as provided in paragraph (b) and in accordance with § 2.101 of this chapter.

(b) Except as provided in paragraph (d), any person who applies for a class 103 construction permit for a nuclear power reactor on or after July 28, 1975 shall submit the document titled "Information Requested by the Attorney General for Antitrust Review" at least nine (9) months but not more than thirty-six months prior to the date of submittal of any part of the application for a class 103 construction permit.

(c) [Reserved]

(d) Any person who applies for a class 103 construction permit for a nuclear power reactor pursuant to the provisions of § 2.101(a-1) and Subpart F of Part 2 of this chapter shall submit the document title "Information Requested by the Attorney General for Antitrust Review" at least nine (9) months but not more than thirty-six months prior to the filing of part two or part three of the application, whichever part is filed first, as specified in § 2.101(a-1) of this chapter.

(e) Any person who applies for a class 103 construction permit for a uranium enrichment or fuel reprocessing plant shall submit such information as may be requested by the Attorney General for antitrust review, as a separate document as soon as possible and in accordance with § 2.101 of this chapter.

[39 FR 34395, Sept. 25, 1974, as amended at 42 FR 22887, May 5, 1977; 42 FR 25721, May 19, 1977; 43 FR 49775, Oct. 25, 1978; 44 FR 60716, Oct. 22, 1979]

§ 50.34 Contents of applications; technical information.

(a) *Preliminary safety analysis report.* Each application for a construction permit shall include a preliminary safety analysis report. The minimum information[5] to be included shall consist of the following:

(1) A description and safety assessment of the site on which the facility is to be located, with appropriate attention to features affecting facility design. Special attention should be directed to the site evaluation factors identified in Part 100 of this chapter. Such assessment shall contain an analysis and evaluation of the major structures, systems and components of the facility which bear significantly on the acceptability of the site under the site evaluation factors identified in Part 100 of this chapter, assuming that the facility will be operated at the ultimate power level which is contemplated by the applicant. With respect to operation at the projected initial power level, the applicant is required to submit information prescribed in paragraphs (a)(2) through (8) of this section, as well as the information required by this paragraph, in support of the application for a construction permit.

(2) A summary description and discussion of the facility, with special attention to design and operating characteristics, unusual or novel design features, and principal safety considerations.

(3) The preliminary design of the facility including:

(i) The principal design criteria for the facility.[6] Appendix A, General Design Criteria for Nuclear Power Plants, establishes minimum requirements for the principal design criteria for water-cooled nuclear power plants similar in design and location to plants for which construction permits have previously been issued by the Commission and provides guidance to applicants for construction permits in establishing principal design criteria for other types of nuclear power units;

(ii) The design bases and the relation of the design bases to the principal design criteria;

(iii) Information relative to materials of construction, general arrangement, and approximate dimensions, sufficient to provide reasonable assurance that the final design will conform to the design bases with adequate margin for safety.

(4) A preliminary analysis and evaluation of the design and performance of structures, systems, and components of the facility with the objective of assessing the risk to public health and safety resulting from operation of the facility and including determination of (i) the margins of safety during normal operations and transient conditions anticipated during the life of the facility, and (ii) the adequacy of structures, systems, and components provided for the prevention of accidents and the mitigation of the consequences of accidents. Analysis and evaluation of ECCS cooling performance following postulated loss-of-coolant accidents shall be performed in accordance with the requirements of § 50.46 of this part for facilities for which construction permits may be issued after December 28, 1974.

(5) An identification and justification for the selection of those variables, conditions, or other items which are determined as the result of preliminary safety analysis and evaluation to be probable subjects of technical specifications for the facility, with special attention given to those items which may significantly influence the final design: *Provided, however,* That this requirement is not applicable to an application for a construction permit filed prior to January 16, 1969.

(6) A preliminary plan for the applicant's organization, training of personnel, and conduct of operations.

(7) A description of the quality assurance program to be applied to the design, fabrication, construction, and testing of the structures, systems, and components of the facility. Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," sets forth the requirements for quality assurance programs for nuclear power plants and fuel reprocessing plants. The description of the quality assurance program for a nuclear power plant or a fuel reprocessing plant shall include a discussion

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[5] The applicant may provide information required by this paragraph in the form of a discussion, with specific references of similarities to and differences from, facilities of similar design for which applications have previously been filed with the Commission.

[6] General design criteria for chemical processing facilities are being developed.

of how the applicable requirements of Appendix B will be satisfied.

(8) An identification of those structures, systems, or components of the facility, if any, which require research and development to confirm the adequacy of their design; and identification and description of the research and development program which will be conducted to resolve any safety questions associated with such structures, systems or components; and a schedule of the research and development program showing that such safety questions will be resolved at or before the latest date stated in the application for completion of construction of the facility.

(9) The technical qualifications of the applicant to engage in the proposed activities in accordance with the regulations in this chapter.

(10) A discussion of the applicant's preliminary plans for coping with emergencies. Appendix E sets forth items which shall be included in these plans.

(11) On or after February 5, 1979, applicants who apply for construction permits for nuclear powerplants to be built on multiunit sites shall identify potential hazards to the structures, systems and components important to safety of operating nuclear facilities from construction activities. A discussion shall also be included of any managerial and administrative controls that will be used during construction to assure the safety of the operating unit.

(b) *Final safety analysis report.* Each application for a license to operate a facility shall include a final safety analysis report. The final safety analysis report shall include information that describes the facility, presents the design bases and the limits on its operation, and presents a safety analysis of the structures, systems, and components and of the facility as a whole, and shall include the following:

(1) All current information, such as the results of environmental and meteorological monitoring programs, which has been developed since issuance of the construction permit, relating to site evaluation factors identified in Part 100 of this chapter.

(2) A description and analysis of the structures, systems, and components of the facility, with emphasis upon performance requirements, the bases, with technical justification therefor, upon which such requirements have been established, and the evaluations required to show that safety functions will be accomplished. The description shall be sufficient to permit understanding of the system designs and their relationship to safety evaluations.

(i) For nuclear reactors, such items as the reactor core, reactor coolant system, instrumentation and control systems, electrical systems, containment system, other engineered safety features, auxiliary and emergency systems, power conversion systems, radioactive waste handling systems, and fuel handling systems shall be discussed insofar as they are pertinent.

(ii) For facilities other than nuclear reactors, such items as the chemical, physical, metallurgical, or nuclear process to be performed, instrumentation and control systems, ventilation and filter systems, electrical systems, auxiliary and emergency systems, and radioactive waste handling systems shall be discussed insofar as they are pertinent.

(3) The kinds and quantities of radioactive materials expected to be produced in the operation and the means for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in Part 20 of this chapter.

(4) A final analysis and evaluation of the design and performance of structures, systems, and components with the objective stated in paragraph (a)(4) of this section and taking into account any pertinent information developed since the submittal of the preliminary safety analysis report. Analysis and evaluation of ECCS cooling performance following postulated loss-of-coolant accidents shall be performed in accordance with the requirements of § 50.46 for facilities for which a license to operate may be issued after December 28, 1974.

(5) A description and evaluation of the results of the applicant's programs, including research and development, if any, to demonstrate that any

safety questions identified at the construction permit stage have been resolved.

(6) The following information concerning facility operation:

(i) The applicant's organizational structure, allocations or responsibilities and authorities, and personnel qualifications requirements.

(ii) Managerial and administrative controls to be used to assure safe operation. Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," sets forth the requirements for such controls for nuclear power plants and fuel reprocessing plants. The information on the controls to be used for a nuclear power plant or a fuel reprocessing plant shall include a discussion of how the applicable requirements of Appendix B will be satisfied.

(iii) Plans for preoperational testing and initial operations.

(iv) Plans for conduct of normal operations, including maintenance, surveillance, and periodic testing of structures, systems, and components.

(v) Plans for coping with emergencies, which shall include the items specified in Appendix E.

(vi) Proposed technical specifications prepared in accordance with the requirements of § 50.36.

(vii) On or after February 5, 1979, applicants who apply for operating licenses for nuclear powerplants to be operated on multiunit sites shall include an evaluation of the potential hazards to the structures, systems, and components important to safety of operating units resulting from construction activities, as well as a description of the managerial and administrative controls to be used to provide assurance that the limiting conditions for operation are not exceeded as a result of construction activities at the multiunit sites.

(7) The technical qualifications of the applicant to engage in the proposed activities in accordance with the regulations in this chapter.

(8) A description and plans for implementation of an operator requalification program. The operator requalification program must as a minimum, meet the requirements for those programs contained in § 55.59 of Part 55 of this chapter.

(9) A description of protection provided against pressurized thermal shock events, including projected values of the reference temperature for reactor vessel beltline materials as defined in § 50.61 (b)(1) and (b)(2).

(c) *Physical security plan.* Each application for a license to operate a production or utilization facility shall include a physical security plan. The plan shall consist of two parts. Part I shall address vital equipment, vital areas, and isolation zones, and shall demonstrate how the applicant plans to comply with the requirements of Part 73 (and Part 11 of this chapter, if applicable, including the identification and description of jobs as required by § 11.11(a), at the proposed facility). Part II shall list tests, inspections, and other means to be used to demonstrate compliance with such requirements, if applicable.

(d) *Safeguards contingency plan.* Each application for a license to operate a production or utilization facility that will be subject to §§ 73.50, 73.55, or § 73.60 of this chapter must include a licensee safeguards contingency plan in accordance with the criteria set forth in Appendix C to 10 CFR Part 73. The safeguards contingency plan shall include plans for dealing with threats, thefts, and radiological sabotage, as defined in Part 73 of this chapter, relating to the special nuclear material and nuclear facilities licensed under this chapter and in the applicant's possession and control. Each application for such a license shall include the first four categories of information contained in the applicant's safeguards contingency plan. (The first four categories of information as set forth in Appendix C to 10 CFR Part 73 are Background, Generic Planning Base, Licensee Planning Base, and Responsibility Matrix. The fifth category of information, Procedures, does not have to be submitted for approval.)[7]

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[7] A physical security plan that contains all the information required in both § 73.55 and Appendix C to Part 73 satisfies the requirement for a contingency plan.

(e) Each applicant for a license to operate a production or utilization facility, who prepares a physical security plan, a safeguards contingency plan, or a guard qualification and training plan, shall protect the plans and other related Safeguards Information against unauthorized disclosure in accordance with the requirements of § 73.21 of this chapter, as appropriate.

(f) *Additional TMI-related requirements.* In addition to the requirements of paragraph (a) of this section, each applicant for a light-water-reactor construction permit or manufacturing license whose application was pending as of February 16, 1982 shall meet the requirements in paragraphs (f) (1) through (3) of this section. This rule applies only to the pending applications by Duke Power Company (Perkins Nuclear Station Units 1, 2 and 3), Houston Lighting & Power Company (Allens Creek Nuclear Generating Station, Unit 1), Portland General Electric Company (Pebble Springs Nuclear Plant, Units 1 and 2), Public Service Company of Oklahoma (Black Fox Station, Units 1 and 2), Puget Sound Power & Light Company (Skagit/Hanford Nuclear Power Project, Units 1 and 2), and Offshore Power Systems (License to Manufacture Floating Nuclear Plants). The number of units that will be specified in the manufacturing license, if issued, will be that number whose start of manufacture, as defined in the license application, can practically begin within a ten-year period commencing on the date of issuance of the manufacturing license, but in no event will that number be in excess of ten. The manufacturing license will require the plant design to be updated no later than five years after its approval. Paragraphs (f)(1)(xii), (2)(ix), and (3)(v) of this section, pertaining to hydrogen control measures, must be met by all applicants covered by this rule. However, the Commission may decide to impose additional requirements and the issue of whether compliance with these provisions, together with 10 CFR 50.44 and Criterion 50 of Appendix A to 10 CFR Part 50, is sufficient for issuance of the manufacturing license may be considered in the manufacturing license proceeding.

(1) To satisfy the following requirements, the application shall provide sufficient information to describe the nature of the studies, how they are to be conducted, estimated submittal dates, and a program to ensure that the results of such studies are factored into the final design of the facility. All studies shall be completed no later than two years following issuance of the construction permit or manufacturing license.[9]

(i) Perform a plant/site specific probabilistic risk assessment, the aim of which is to seek such improvements in the reliability of core and containment heat removal systems as are significant and practical and do not impact excessively on the plant. (II.B.8)

(ii) Perform an evaluation of the proposed auxiliary feedwater system (AFWS), to include (applicable to PWR's only) (II.E.1.1):

(A) A simplified AFWS reliability analysis using event-tree and fault-tree logic techniques.

(B) A design review of AFWS.

(C) An evaluation of AFWS flow design bases and criteria.

(iii) Perform an evaluation of the potential for and impact of reactor coolant pump seal damage following small-break LOCA with loss of offsite power. If damage cannot be precluded, provide an analysis of the limiting small-break loss-of-coolant accident with subsequent reactor coolant pump seal damage. (II.K.2.16 and II.K.3.25)

(iv) Perform an analysis of the probability of a small-break loss-of-coolant accident (LOCA) caused by a stuck-open power-operated relief valve (PORV). If this probability is a significant contributor to the probability of small-break LOCA's from all causes, provide a description and evaluation of the effect on small-break LOCA probability of an automatic PORV isolation system that would operate when the reactor coolant system pressure falls after the PORV has opened. (Applicable to PWR's only). (II.K.3.2)

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[9] Alphanumeric designations correspond to the related action plan items in NUREG 0718 and NUREG 0660, "NRC Action Plan Developed as a Result of the TMI-2 Accident." They are provided herein for information only.

(v) Perform an evaluation of the safety effectiveness of providing for separation of high pressure coolant injection (HPCI) and reactor core isolation cooling (RCIC) system initiation levels so that the RCIC system initiates at a higher water level than the HPCI system, and of providing that both systems restart on low water level. (For plants with high pressure core spray systems in lieu of high pressure coolant injection systems, substitute the words, "high pressure core spray" for "high pressure coolant injection" and "HPCS" for "HPCI") (Applicable to BWR's only). (II.K.3.13)

(vi) Perform a study to identify practicable system modifications that would reduce challenges and failures of relief valves, without compromising the performance of the valves or other systems. (Applicable to BWR's only). (II.K.3.16)

(vii) Perform a feasibility and risk assessment study to determine the optimum automatic depressurization system (ADS) design modifications that would eliminate the need for manual activation to ensure adequate core cooling. (Applicable to BWR's only). (II.K.3.18)

(viii) Perform a study of the effect on all core-cooling modes under accident conditions of designing the core spray and low pressure coolant injection systems to ensure that the systems will automatically restart on loss of water level, after having been manually stopped, if an initiation signal is still present. (Applicable to BWR's only). (II.K.3.21)

(ix) Perform a study to determine the need for additional space cooling to ensure reliable long-term operation of the reactor core isolation cooling (RCIC) and high-pressure coolant injection (HPCI) systems, following a complete loss of offsite power to the plant for at least two (2) hours. (For plants with high pressure core spray systems in lieu of high pressure coolant injection systems, substitute the words, "high pressure core spray" for "high pressure coolant injection" and "HPCS" for "HPCI") (Applicable to BWR's only). (II.K.3.24)

(x) Perform a study to ensure that the Automatic Depressurization System, valves, accumulators, and associated equipment and instrumentation will be capable of performing their intended functions during and following an accident situation, taking no credit for non-safety related equipment or instrumentation, and accounting for normal expected air (or nitrogen) leakage through valves. (Applicable to BWR's only). (II.K.3.28)

(xi) Provide an evaluation of depressurization methods, other than by full actuation of the automatic depressurization system, that would reduce the possibility of exceeding vessel integrity limits during rapid cooldown. (Applicable to BWR's only) (II.K.3.45)

(xii) Perform an evaluation of alternative hydrogen control systems that would satisfy the requirements of paragraph (f)(2)(ix) of this section. As a minimum include consideration of a hydrogen ignition and post-accident inerting system. The evaluation shall include:

(A) A comparison of costs and benefits of the alternative systems considered.

(B) For the selected system, analyses and test data to verify compliance with the requirements of (f)(2)(ix) of this section.

(C) For the selected system, preliminary design descriptions of equipment, function, and layout.

(2) To satisfy the following requirements, the application shall provide sufficient information to demonstrate that the required actions will be satisfactorily completed by the operating license stage. This information is of the type customarily required to satisfy 10 CFR 50.35(a)(2) or to address unresolved generic safety issues.

(i) Provide simulator capability that correctly models the control room and includes the capability to simulate small-break LOCA's. (Applicable to construction permit applicants only) (I.A.4.2.)

(ii) Establish a program, to begin during construction and follow into operation, for integrating and expanding current efforts to improve plant procedures. The scope of the program shall include emergency procedures, reliability analyses, human factors engineering, crisis management, operator training, and coordination with INPO and other industry efforts. (Applicable to construction permit applicants only) (I.C.9)

(iii) Provide, for Commission review, a control room design that reflects state-of-the-art human factor principles prior to committing to fabrication or revision of fabricated control room panels and layouts. (I.D.1)

(iv) Provide a plant safety parameter display console that will display to operators a minimum set of parameters defining the safety status of the plant, capable of displaying a full range of important plant parameters and data trends on demand, and capable of indicating when process limits are being approached or exceeded. (I.D.2)

(v) Provide for automatic indication of the bypassed and operable status of safety systems. (I.D.3)

(vi) Provide the capability of high point venting of noncondensible gases from the reactor coolant system, and other systems that may be required to maintain adequate core cooling. Systems to achieve this capability shall be capable of being operated from the control room and their operation shall not lead to an unacceptable increase in the probability of loss-of-coolant accident or an unacceptable challenge to containment integrity. (II.B.1)

(vii) Perform radiation and shielding design reviews of spaces around systems that may, as a result of an accident, contain TID 14844 source term radioactive materials, and design as necessary to permit adequate access to important areas and to protect safety equipment from the radiation environment. (II.B.2)

(viii) Provide a capability to promptly obtain and analyze samples from the reactor coolant system and containment that may contain TID 14844 source term radioactive materials without radiation exposures to any individual exceeding 5 rem to the whole-body or 75 rem to the extremities. Materials to be analyzed and quanified include certain radionuclides that are indicators of the degree of core damage (e.g., noble gases, iodines and cesiums, and non-volatile isotopes), hydrogen in the containment atmosphere, dissolved gases, chloride, and boron concentrations. (II.B.3)

(ix) Provide a system for hydrogen control that can safely accommodate hydrogen generated by the equivalent of a 100% fuel-clad metal water reaction. Preliminary design information on the tentatively preferred system option of those being evaluated in paragraph (f)(1)(xii) of this section is sufficient at the construction permit stage. The hydrogen control system and associated systems shall provide, with reasonable assurance, that: (II.B.8)

(A) Uniformly distributed hydrogen concentrations in the containment do not exceed 10% during and following an accident that releases an equivalent amount of hydrogen as would be generated from a 100% fuel clad metal-water reaction, or that the post-accident atmosphere will not support hydrogen combustion.

(B) Combustible concentrations of hydrogen will not collect in areas where unintended combustion or detonation could cause loss of containment integrity or loss of appropriate mitigating features.

(C) Equipment necessary for achieving and maintaining safe shutdown of the plant and maintaining containment integrity will perform its safety function during and after being exposed to the environmental conditions attendant with the release of hydrogen generated by the equivalent of a 100% fuel-clad metal water reaction including the environmental conditions created by activation of the hydrogen control system.

(D) If the method chosen for hydrogen control is a post-accident inerting system, inadvertent actuation of the system can be safely accommodated during plant operation.

(x) Provide a test program and associated model development and conduct tests to qualify reactor coolant system relief and safety valves and, for PWR's, PORV block valves, for all fluid conditions expected under operating conditions, transients and accidents. Consideration of anticipated transients without scram (ATWS) conditions shall be included in the test program. Actual testing under ATWS conditions need not be carried out until subsequent phases of the test program are developed. (II.D.1)

(xi) Provide direct indication of relief and safety valve position (open or closed) in the control room. (II.D.3)

(xii) Provide automatic and manual auxiliary feedwater (AFW) system initiation, and provide auxiliary feedwater system flow indication in the control room. (Applicable to PWR's only) (II.E.1.2)

(xiii) Provide pressurizer heater power supply and associated motive and control power interfaces sufficient to establish and maintain natural circulation in hot standby conditions with only onsite power available. (Applicable to PWR's only) (II.E.3.1)

(xiv) Provide containment isolation systems that: (II.E.4.2)

(A) Ensure all non-essential systems are isolated automatically by the containment isolation system,

(B) For each non-essential penetration (except instrument lines) have two isolation barriers in series,

(C) Do not result in reopening of the containment isolation valves on resetting of the isolation signal,

(D) Utilize a containment set point pressure for initiating containment isolation as low as is compatible with normal operation,

(E) Include automatic closing on a high radiation signal for all systems that provide a path to the environs.

(xv) Provide a capability for containment purging/venting designed to minimize the purging time consistent with ALARA principles for occupational exposure. Provide and demonstrate high assurance that the purge system will reliably isolate under accident conditions. (II.E.4.4)

(xvi) Establish a design criterion for the allowable number of actuation cycles of the emergency core cooling system and reactor protection system consistent with the expected occurrence rates of severe overcooling events (considering both anticipated transients and accidents). (Applicable to B&W designs only). (II.E.5.1)

(xvii) Provide instrumentation to measure, record and readout in the control room: (A) containment pressure, (B) containment water level, (C) containment hydrogen concentration, (D) containment radiation intensity (high level), and (E) noble gas effluents at all potential, accident release points. Provide for continuous sampling of radioactive iodines and particulates in gaseous effluents from all potential accident release points, and for onsite capability to analyze and measure these samples. (II.F.1)

(xviii) Provide instruments that provide in the control room an unambiguous indication of inadequate core cooling, such as primary coolant saturation meters in PWR's, and a suitable combination of signals from indicators of coolant level in the reactor vessel and in-core thermocouples in PWR's and BWR's. (II.F.2)

(xix) Provide instrumentation adequate for monitoring plant conditions following an accident that includes core damage. (II.F.3)

(xx) Provide power supplies for pressurizer relief valves, block valves, and level indicators such that: (A) Level indicators are powered from vital buses; (B) motive and control power connections to the emergency power sources are through devices qualified in accordance with requirements applicable to systems important to safety and (C) electric power is provided from emergency power sources. (Applicable to PWR's only). (II.G.1)

(xxi) Design auxiliary heat removal systems such that necessary automatic and manual actions can be taken to ensure proper functioning when the main feedwater system is not operable. (Applicable to BWR's only). (II.K.1.22)

(xxii) Perform a failure modes and effects analysis of the integrated control system (ICS) to include consideration of failures and effects of input and output signals to the ICS. (Applicable to B&W-designed plants only). (II.K.2.9)

(xxiii) Provide, as part of the reactor protection system, an anticipatory reactor trip that would be actuated on loss of main feedwater and on turbine trip. (Applicable to B&W-designed plants only). (II.K.2.10)

(xxiv) Provide the capability to record reactor vessel water level in one location on recorders that meet normal post-accident recording requirements. (Applicable to BWR's only). (II.K.3.23)

(xxv) Provide an onsite Technical Support Center, an onsite Operational Support Center, and, for construction permit applications only, a nearsite Emergency Operations Facility. (III.A.1.2).

(xxvi) Provide for leakage control and detection in the design of systems outside containment that contain (or might contain) TID 14844 source term radioactive materials following an accident. Applicants shall submit a leakage control program, including an initial test program, a schedule for retesting these systems, and the actions to be taken for minimizing leakage from such systems. The goal is to minimize potential exposures to workers and public, and to provide reasonable assurance that excessive leakage will not prevent the use of systems needed in an emergency. (III.D.1.1)

(xxvii) Provide for monitoring of inplant radiation and airborne radioactivity as appropriate for a broad range of routine and accident conditions. (III.D.3.3)

(xxviii) Evaluate potential pathways for radioactivity and radiation that may lead to control room habitability problems under accident conditions resulting in a TID 14844 source term release, and make necessary design provisions to preclude such problems. (III.D.3.4)

(3) To satisfy the following requirements, the application shall provide sufficient information to demonstrate that the requirement has been met. This information is of the type customarily required to satisfy paragraph (a)(1) of this section or to address the applicant's technical qualifications and management structure and competence.

(i) Provide administrative procedures for evaluating operating, design and construction experience and for ensuring that applicable important industry experiences will be provided in a timely manner to those designing and constructing the plant. (I.C.5)

(ii) Ensure that the quality assurance (QA) list required by Criterion II, App. B, 10 CFR Part 50 includes all structures, systems, and components important to safety. (I.F.1)

(iii) Establish a quality assurance (QA) program based on consideration of: (A) Ensuring independence of the organization performing checking functions from the organization responsible for performing the functions; (B) performing quality assurance/quality control functions at construction sites to the maximum feasible extent; (C) including QA personnel in the documented review of and concurrence in quality related procedures associated with design, construction and installation; (D) establishing criteria for determining QA programmatic requirements; (E) establishing qualification requirements for QA and QC personnel; (F) sizing the QA staff commensurate with its duties and responsibilities; (G) establishing procedures for maintenance of "as-built" documentation; and (H) providing a QA role in design and analysis activities. (I.F.2)

(iv) Provide one or more dedicated containment penetrations, equivalent in size to a single 3-foot diameter opening, in order not to preclude future installation of systems to prevent containment failure, such as a filtered vented containment system. (II.B.8)

(v) Provide preliminary design information at a level of detail consistent with that normally required at the construction permit stage of review sufficient to demonstrate that: (II.B.8)

(A)(*1*) Containment integrity will be maintained (i.e., for steel containments by meeting the requirements of the ASME Boiler and Pressure Vessel Code, Section III, Division 1, Subsubarticle NE-3220, Service Level C Limits, except that evaluation of instability is not required, considering pressure and dead load alone. For concrete containments by meeting the requirements of the ASME Boiler Pressure Vessel Code, Section III, Division 2 Subsubarticle CC-3720, Factored Load Category, considering pressure and dead load alone) during an accident that releases hydrogen generated from 100% fuel clad metal-water reaction accompanied by either hydrogen burning or the added pressure from post-accident inerting assuming carbon dioxide is the inerting agent. As a minimum, the specific code requirements set forth above appropriate for each type of containment will be met for a combination of dead load and an internal pressure of 45 psig. Modest deviations from these criteria will be considered by the staff, if good cause is shown by an applicant. Systems necessary to ensure containment integrity shall also be demonstrated to perform their function under these conditions.

(*2*) Subarticle NE-3220, Division 1, and subarticle CC-3720, Division 2, of Section III of the July 1, 1980 ASME Boiler and Pressure Vessel Code, which are referenced in paragraphs (f)(3)(v)(A)(*1*) and (f)(3)(v)(B)(*1*) of this section, were approved for incorporation by reference by the Director of the Office of the Federal Register. A notice of any changes made to the material incorporated by reference will be published in the FEDERAL REGISTER. Copies of the ASME Boiler and Pressure Vessel Code may be purchased from the American Society of Mechanical Engineers, United Engineering Center, 345 East 47th St., New York, NY 10017. It is also available for inspection at the Nuclear Regulatory Commission's Public Document Room, 2120 L Street, NW., Washington, D.C.

(B)(*1*) Containment structure loadings produced by an inadvertent full actuation of a post-accident inerting hydrogen control system (assuming carbon dioxide), but not including seismic or design basis accident loadings will not produce stresses in steel containments in excess of the limits set forth in the ASME Boiler and Pressure Vessel Code, Section III, Division 1, Subsubarticle NE-3220, Service Level A Limits, except that evaluation of instability is not required (for concrete containments the loadings specified above will not produce strains in the containment liner in excess of the limits set forth in the ASME Boiler and Pressure Vessel Code, Section III, Division 2, Subsubarticle CC-3720, Service Load Category, (*2*) The containment has the capability to safely withstand pressure tests at 1.10 and 1.15 times (for steel and concrete containments, respectively) the pressure calculated to result from carbon dioxide inerting.

(vi) For plant designs with external hydrogen recombiners, provide redundant dedicated containment penetrations so that, assuming a single failure, the recombiner systems can be connected to the containment atmosphere. (II.E.4.1)

(vii) Provide a description of the management plan for design and construction activities, to include: (A) The organizational and management structure singularly responsible for direction of design and construction of the proposed plant; (B) technical resources director by the applicant; (C) details of the interaction of design and construction within the applicant's organization and the manner by which the applicant will ensure close integration of the architect engineer and the nuclear steam supply vendor; (D) proposed procedures for handling the transition to operation; (E) the degree of top level management oversight and technical control to be exercised by the applicant during design and construction, including the preparation and implementation of procedures necessary to guide the effort. (II.J.3.1)

(g) *Conformance with the Standard Review Plan (SRP).* (1)(i) Applications for light water cooled nuclear power plant operating licenses docketed after May 17, 1982 shall include an evaluation of the facility against the Standard Review Plan (SRP) in effect on May 17, 1982 or the SRP revision in effect six months prior to the docket date of the application, whichever is later.

(ii) Applications for light water cooled nuclear power plant construction permits, manufacturing licenses, and preliminary or final design approvals for standard plants docketed after May 17, 1982 shall include an evaluation of the facility against the SRP in effect on May 17, 1982 or the SRP revision in effect six months prior to the docket date of the application, whichever is later.

(2) The evaluation required by this section shall include an identification and description of all differences in design features, analytical techniques, and procedural measures proposed for a facility and those corresponding features, techniques, and measures given in the SRP acceptance criteria. Where such a difference exists, the evaluation shall discuss how the alternative proposed provides an acceptable method of complying with those rules

or regulations of Commission, or portions thereof, that underlie the corresponding SRP acceptance criteria.

(3) The SRP was issued to establish criteria that the NRC staff intends to use in evaluating whether an applicant/licensee meets the Commission's regulations. The SRP is not a substitute for the regulations, and compliance is not a requirement. Applicants shall identify differences from the SRP acceptance criteria and evaluate how the proposed alternatives to the SRP criteria provide an acceptable method of complying with the Commission's regulations.

[33 FR 18612, Dec. 17, 1968, as amended at 34 FR 6037, Apr. 3, 1969; 34 FR 6770, Apr. 23, 1969; 35 FR 10499, June 27, 1970; 35 FR 19567, Dec. 24, 1970; 36 FR 3256, Feb. 20, 1971; 36 FR 4861, Mar. 13, 1971; 36 FR 18201, Sept. 11, 1971]

EDITORIAL NOTE: For additional FEDERAL REGISTER citations affecting § 50.34, see the List of CFR Sections Affected in the Finding Aids section of this volume.

§ 50.34a Design objectives for equipment to control releases of radioactive material in effluents—nuclear power reactors.

(a) An application for a permit to construct a nuclear power reactor shall include a description of the preliminary design of equipment to be installed to maintain control over radioactive materials in gaseous and liquid effluents produced during normal reactor operations, including expected operational occurrences. In the case of an application filed on or after January 2, 1971, the application shall also identify the design objectives, and the means to be employed, for keeping levels of radioactive material in effluents to unrestricted areas as low as is reasonably achievable. The term "as low as is reasonably achievable" as used in this part means as low as is reasonably achievable taking into account the state of technology, and the economics of improvements in relation to benefits to the public health and safety and other societal and socioeconomic considerations, and in relation to the utilization of atomic energy in the public interest. The guides set out in Appendix I to this part provide numerical guidance on design objectives for light-water-cooled nuclear power reactors to meet the requirements that radioactive material in effluents released to unrestricted areas be kept as low as is reasonably achievable. These numerical guides for design objectives and limiting conditions for operation are not to be construed as radiation protection standards.

(b) Each application for a permit to construct a nuclear power reactor shall include:

(1) A description of the preliminary design of equipment to be installed pursuant to paragraph (a) of this section;

(2) An estimate of:

(i) The quantity of each of the principal radio-nuclides expected to be released annually to unrestricted areas in liquid effluents produced during normal reactor operations; and

(ii) The quantity of each of the principal radio-nuclides of the gases, halides, and particulates expected to be released annually to unrestricted areas in gaseous effluents produced during normal reactor operations.

(3) A general description of the provisions for packaging, storage, and shipment offsite of solid waste containing radioactive materials resulting from treatment of gaseous and liquid effluents and from other sources.

(c) Each application for a license to operate a nuclear power reactor shall include (1) a description of the equipment and procedures for the control of gaseous and liquid effluents and for the maintenance and use of equipment installed in radioactive waste systems, pursuant to paragraph (a) of this section; an (2) a revised estimate of the information required in paragraph (b)(2) of this section if the expected releases and exposures differ significantly from the estimates submitted in the application for a construction permit.

[35 FR 18387, Dec. 3, 1970, as amended at 40 FR 58847, Dec. 19, 1975]

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§ 50.35 Issuance of construction permits.[1]

(a) When an applicant has not supplied initially all of the technical information required to complete the application and support the issuance of a construction permit which approves all proposed design features, the Commission may issue a construction permit if the Commission finds that (1) the applicant has described the proposed design of the facility, including, but not limited to, the principal architectural and engineering criteria for the design, and has identified the major features or components incorporated therein for the protection of the health and safety of the public; (2) such further technical or design information as may be required to complete the safety analysis, and which can reasonably be left for later consideration, will be supplied in the final safety analysis report; (3) safety features or components, if any, which require research and development have been described by the applicant and the applicant has identified, and there will be conducted, a research and development program reasonably designed to resolve any safety questions associated with such features or components; and that (4) on the basis of the foregoing, there is reasonable assurance that, (i) such safety questions will be satisfactorily resolved at or before the latest date stated in the application for completion of construction of the proposed facility, and (ii) taking into consideration the site criteria contained in Part 100 of this chapter, the proposed facility can be constructed and operated at the proposed location without undue risk to the health and safety of the public.

NOTE: When an applicant has supplied initially all of the technical information required to complete the application, including the final design of the facility, the findings required above will be appropriately modified to reflect that fact.

(b) A construction permit will constitute an authorization to the applicant to proceed with construction but will not constitute Commission approval of the safety of any design feature or specification unless the applicant specifically requests such approval and such approval is incorporated in the permit. The applicant, at his option, may request such approvals in the construction permit or, from time to time, by amendment of his construction permit. The Commission may, in its discretion, incorporate in any construction permit provisions requiring the applicant to furnish periodic reports of the progress and results of research and development programs designed to resolve safety questions.

(c) Any construction permit will be subject to the limitation that a license authorizing operation of the facility will not be issued by the Commission until (1) the applicant has submitted to the Commission, by amendment to the application, the complete final safety analysis report, portions of which may be submitted and evaluated from time to time, and (2) the Commission has found that the final design provides reasonable assurance that the health and safety of the public will not be endangered by operation of the facility in accordance with the requirements of the license and the regulations in this chapter.

[27 FR 12915, Dec. 29, 1962, as amended at 31 FR 12780, Sept. 30, 1966; 35 FR 5318, Mar. 31, 1970; 35 FR 6644, Apr. 25, 1970; 35 FR 11461, July 7, 1970]

§ 50.36 Technical specifications.

(a) Each applicant for a license authorizing operation of a production or utilization facility shall include in his application proposed technical specifications in accordance with the requirements of this section. A summary statement of the bases or reasons for such specifications, other than those covering administrative controls, shall also be included in the application, but shall not become part of the technical specifications.

(b) Each license authorizing operation of a production or utilization facility of a type described in § 50.21 or § 50.22 will include technical specifications. The technical specifications will be derived from the analyses and evaluation included in the safety analysis report, and amendments thereto, submitted pursuant to § 50.34. The Commission may include such additional technical specifications as the Commission finds appropriate.

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[1] The Commission may issue a provisional construction permit pursuant to the regulations in this part in effect on March 30, 1970, for any facility for which a notice of hearing on an application for a provisional construction permit has been published on or before that date.

(c) Technical specifications will include items in the following categories:

(1) *Safety limits, limiting safety system settings, and limiting control settings.* (i)(A) Safety limits for nuclear reactors are limits upon important process variables that are found to be necessary to reasonably protect the integrity of certain of the physical barriers that guard against the uncontrolled release of radioactivity. If any safety limit is exceeded, the reactor must be shut down. The licensee shall notify the Commission, review the matter, and record the results of the review, including the cause of the condition and the basis for corrective action taken to preclude recurrence. Operation must not be resumed until authorized by the Commission. The licensee shall retain the record of the results of each review until the Commission terminates the license for the reactor, except for nuclear power reactors licensed under § 50.21(b) or § 50.22 of this part. For these reactors, the licensee shall notify the Commission as required by § 50.72 and submit a Licensee Event Report to the Commission as required by § 50.73. Licensees in these cases shall retain the records of the review for a period of three years following issuance of a Licensee Event Report.

(B) Safety limits for fuel reprocessing plants are those bounds within which the process variables must be maintained for adequate control of the operation and that must not be exceeded in order to protect the integrity of the physical system that is designed to guard against the uncontrolled release or radioactivity. If any safety limit for a fuel reprocessing plant is exceeded, corrective action must be taken as stated in the technical specification or the affected part of the process, or the entire process if required, must be shut down, unless this action would further reduce the margin of safety. The licensee shall notify the Commission, review the matter, and record the results of the review, including the cause of the condition and the basis for corrective action taken to preclude recurrence. If a portion of the process or the entire process has been shutdown, operation must not be resumed until authorized by the Commission. The licensee shall retain the record of the results of each review until the Commission terminates the license for the plant.

(ii)(A) Limiting safety system settings for nuclear reactors are settings for automatic protective devices related to those variables having significant safety functions. Where a limiting safety system setting is specified for a variable on which a safety limit has been placed, the setting must be so chosen that automatic protective action will correct the abnormal situation before a safety limit is exceeded. If, during operation, it is determined that the automatic safety system does not function as required, the licensee shall take appropriate action, which may include shutting down the reactor. The licensee shall notify the Commission, review the matter, and record the results of the review, including the cause of the condition and the basis for corrective action taken to preclude recurrence. The licensee shall retain the record of the results of each review until the Commission terminates the license for the reactor except for nuclear power reactors licensed under § 50.21(b) or § 50.22 of this part. For these reactors, the licensee shall notify the Commission as required by § 50.72 and submit a Licensee Event Report to the Commission as required by § 50.73. Licensees in these cases shall retain the records of the review for a period of three years following issuance of a Licensee Event Report.

(B) Limiting control settings for fuel reprocessing plants are settings for automatic alarm or protective devices related to those variables having significant safety functions. Where a limiting control setting is specified for a variable on which a safety limit has been placed, the setting must be so chosen that protective action, either automatic or manual, will correct the abnormal situation before a safety limit is exceeded. If, during operation, the automatic alarm or protective devices do not function as required, the licensee shall take appropriate action to maintain the variables within the limiting control-setting values and to repair promptly the automatic devices or to shut down the affected part of the process and, if required, to shut down the entire process for repair of automatic devices. The licensee shall notify the Commission, review the matter, and record the results of the review, including the cause of the condition and the basis for corrective action taken to preclude recurrence. The licensee shall retain the record of the results of each review until the Commission terminates the license for the plant.

(2) *Limiting conditions for operation.* Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met. When a limiting condition for operation of any process step in the system of a fuel reprocessing plant is not met, the licensee shall shut down that part of the operation or follow any remedial action permitted by the technical specifications until the condition can be met. In the case of a nuclear reactor not licensed under § 50.21(b) or § 50.22 of this part or fuel reprocessing plant, the licensee shall notify the Commission, review the matter, and record the results of the review, including the cause of the condition and the basis for corrective action taken to preclude recurrence. The licensee shall retain the record of the results of each review until the Commission terminates the license for the nuclear reactor or the fuel reprocessing plant. In the case of nuclear power reactors licensed under § 50.21(b) or § 50.22, the licensee shall notify the Commission if required by § 50.72 and shall submit a Licensee Event Report to the Commission as required by § 50.73. In this case, licensees shall retain records associated with preparation of a Licensee Event Report for a period of three years following issuance of the report. For events which do not require a Licensee Event Report, the licensee shall retain each record as required by the technical specifications.

(3) *Surveillance requirements.* Surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within the safety limits, and that the limiting conditions of operation will be met.

(4) *Design features.* Design features to be included are those features of the facility such as materials of construction and geometric arrangements, which, if altered or modified, would have a significant effect on safety and are not covered in categories described in paragraphs (c) (1), (2), and (3) of this section.

(5) *Administrative controls.* Administrative controls are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner. Each licensee shall submit any reports to the Commission pursuant to approved technical specifications as specified in § 50.4.

(6) *Initial notification.* Reports made to the Commission by licensees in response to the requirements of this section must be made as follows:

(i) Licensees that have an installed Emergency Notification System shall make the initial notification to the NRC Operations Center in accordance with § 50.72 of this part.

(ii) All other licensees shall make the initial notification by telephone to the Administrator of the appropriate NRC Regional Office listed in Appendix D, Part 20, of this chapter.

(7) *Written Reports.* Licensees for nuclear power reactors licensed under § 50.21(b) and § 50.22 of this part shall submit written reports to the Commission in accordance with § 50.73 of this part for events described in paragraphs (c)(1) and (c)(2) of this section. For all licensees, the Commission may require Special Reports as appropriate.

(d)(1) This section shall not be deemed to modify the technical specifications included in any license issued prior to January 16, 1969. A license in which technical specifications have not been designated shall be deemed to include the entire safety analysis report as technical specifications.

(2) An applicant for a license authorizing operation of a production or utilization facility to whom a construction permit has been issued prior to January 16, 1969, may submit technical specifications in accordance with this section, or in accordance with the requirements of this part in effect prior to January 16, 1969.

(3) At the initiative of the Commission or the licensee, any license may be amended to include technical specifications of the scope and content which would be required if a new license were being issued.

[33 FR 18612, Dec. 17, 1968, as amended at 48 FR 33860, July 26, 1983; 51 FR 40308, Nov. 6, 1986; 53 FR 19249, May 27, 1988]

§ 50.36a Technical specifications on effluents from nuclear power reactors.

(a) In order to keep releases of radioactive materials to unrestricted areas during normal reactor operations, including expected operational occurrences, as low as is reasonably achievable, each license authorizing operation of a nuclear power reactor will include technical specifications that, in addition to requiring compliance with applicable provisions of § 20.106 of this chapter, require:

(1) That operating procedures developed pursuant to § 50.34a(c) for the control of effluents be established and followed and that equipment installed in the radioactive waste system, pursuant to § 50.34(a), be maintained and used. The licensee shall retain the operating procedures in effect as a record until the Commission terminates the reactor license and shall retain each superseded revision of the procedures for three years from the date it was superseded.

(2) Each licensee shall submit a report to the Commission within 60 days after January 1 and July 1 of each year, that specifies the quantity of each of the principal radionuclides released to unrestricted areas in liquid and in gaseous effluents during the previous six months of operation, including any other information as may be required by the Commission to estimate maximum potential annual radiation doses to the public resulting from effluent releases. The report must be submitted as specified in § 50.4. If quantities of radioactive materials released during the reporting period are significantly above design objectives, the report must cover this specifically. On the basis of these reports and any additional information the Commission may obtain from the licensee or others, the Commission may require the licensee to take action as the Commission deems appropriate.

(b) In establishing and implementing the operating procedures described in paragraph (a) of this section, the licensee shall be guided by the following considerations: Experience with the design, construction and operation of nuclear power reactors indicates that compliance with the technical specifications described in this section will keep average annual releases of radioactive material in effluents at small percentages of the limits specified in § 20.106 of this chapter and in the operating license. At the same time, the licensee is permitted the flexibility of operation, compatible with considerations of health and safety, to assure that the public is provided a dependable source of power even under unusual operating conditions which may temporarily result in releases higher than such small percentages, but still within the limits specified in § 20.106 of this chapter and the operating license. It is expected that in using this operational flexibility under unusual operating conditions, the licensee will exert his best efforts to keep levels of radioactive material in effluents as low as is reasonably achievable. The guides set out in Appendix I provide numerical guidance on limiting conditions for operation for light-water-cooled nuclear power reactors to meet the requirement that radioactive materials in effluents released to unrestricted areas be kept as low as is reasonably achievable.

[35 FR 18388, Dec. 3, 1970, as amended at 40 FR 8789, Mar. 3, 1975; 40 FR 19442, May 5, 1975; 40 FR 58847, Dec. 19, 1975; 41 FR 16446, Apr. 19, 1976; 51 FR 40308, Nov. 6, 1986; 53 FR 19250, May 27, 1988]

§ 50.36b Environmental conditions.

Each license authorizing operation of a production or utilization facility which is of a type described in § 50.21(b) (2) or (3) or § 50.22 or is a testing facility may include conditions to protect the environment to be set out in an attachment to the license which is incorporated in and made a part of the license. These conditions will be derived from information contained in the environmental report and the supplement to the environmental report submitted pursuant to §§ 51.50 and 51.53 of this chapter as analyzed and evaluated in the NRC record of decision, and will identify the obligations of the licensee in the environmental area, including, as appropriate, requirements for reporting and keeping records of environmental data, and any conditions and monitoring requirements for the protection of the nonaquatic environment.

[49 FR 9404, Mar. 12, 1984]

§ 50.37 Agreement limiting access to Restricted Data.

As part of his application and in any event prior to the receipt of Restricted Data or the issuance of a license or construction permit, the applicant shall agree in writing that he will not permit any individual to have access to Restricted Data until the Civil Service Commission shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual, and the Commission shall have determined that permitting such person to have access to Restricted Data will not endanger the common defense and security. The agreement of the applicant in this regard shall be deemed part of the license or construction permit, whether so stated therein or not.

§ 50.38 Ineligibility of certain applicants.

Any person who is a citizen, national, or agent of a foreign country, or any corporation, or other entity which the Commission knows or has reason to believe is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government, shall be ineligible to apply for and obtain a license.

[21 FR 355, Jan. 16, 1956, as amended at 43 FR 6924, Feb. 17, 1978]

§ 50.39 Public inspection of applications.

Applications and documents submitted to the Commission in connection with applications may be made available for public inspection in accordance with the provisions of the regulations contained in Part 2 of this chapter.

STANDARDS FOR LICENSES AND CONSTRUCTION PERMITS

§ 50.40 Common standards.

In determining that a license will be issued to an applicant, the Commission will be guided by the following considerations:

(a) The processes to be performed, the operating procedures, the facility and equipment, the use of the facility, and other technical specifications, or the proposals, in regard to any of the foregoing collectively provide reasonable assurance that the applicant will comply with the regulations in this chapter, including the regulations in Part 20, and that the health and safety of the public will not be endangered.

(b) The applicant is technically and financially qualified to engage in the proposed activities in accordance with the regulations in this chapter. However, no consideration of financial qualification is necessary for an electric utility applicant for an operating license for a utilization facility of the type described in § 50.21(b) or § 50.22.

(c) The issuance of a license to the applicant will not, in the opinion of the Commission, be inimical to the common defense and security or to the health and safety of the public.

(d) Any applicable requirements of Subpart A of Part 51 have been satisfied.

[21 FR 355, Jan. 19, 1956, as amended at 36 FR 12731, July 7, 1971; 49 FR 9404, Mar. 12, 1984; 49 FR 35753, Sept. 12, 1984]

§ 50.41 Additional standards for class 104 licenses.

In determining that a class 104 license will be issued to an applicant, the Commission will, in addition to applying the standards set forth in § 50.40 be guided by the following considerations:

(a) The Commission will permit the widest amount of effective medical therapy possible with the amount of special nuclear material available for such purposes.

(b) The Commission will permit the conduct of widespread and diverse research and development.

(c) An application for a class 104 operating license as to which a person who intervened or sought by timely written notice to the Commission to intervene in the construction permit proceeding for the facility to obtain a determination of antitrust considerations or to advance a jurisdictional basis for such determination has requested an antitrust review under section 105 of the Act within 25 days after the date of publication in the FEDERAL REGISTER of notice of filing of the application for an operating license or December 19, 1970, whichever is later, is also subject to the provisions of § 50.42(b).

[21 FR 355, Jan. 19, 1956, as amended at 35 FR 19660, Dec. 29, 1970]

§ 50.42 Additional standards for class 103 licenses.

In determining whether a class 103 license will be issued to an applicant, the Commission will, in addition to applying the standards set forth in § 50.40, be guided by the following considerations:

(a) The proposed activities will serve a useful purpose proportionate to the quantities of special nuclear material or source material to be utilized.

(b) Due account will be taken of the advice provided by the Attorney General, pursuant to subsection 105c of the Act, and to such evidence as may be provided during any proceedings in connection with the antitrust aspects of the application. For this purpose, the Commission will promptly transmit to the Attorney General a copy of the license application, and request such advice as the Attorney General determines to be appropriate in regard to the finding to be made by the Commission as to whether the proposed license would create or maintain a situation inconsistent with the antitrust laws, as specified in subsection 105a of the Act: *Provided*, That this requirement will not apply with respect to the types of class 103 licenses which the Commission, with the approval of the Attorney General, may determine would not significantly affect the applicant's activities under the antitrust laws: *And provided further*, That this requirement will not apply to an application for a license to operate a production or utilization facility for which a class 103 construction permit was issued unless the Commission, after consultation with the Attorney General, determines such review is advisable on the ground that significant changes in the licensee's activities or proposed activities have occurred subsequent to the previous review by the Attorney General and the Commission. Upon receipt of the Attorney General's advice, the Commission will cause such advice to be published in the FEDERAL REGISTER. After consideration of the antitrust aspects of the application, the Commission, if it finds that the license to be issued or continued, would create or maintain a situation inconsistent with the antitrust laws as specified in subsection 105a of the Act, will consider, in determining whether a license should be issued or continued, such other factors as the Commission in its judgment deems necessary to protect the public interest, including the need for power in the affected area.[1]

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[1] As permitted by subsection 105c(8) of the Act, with respect to proceedings in which an application for a construction permit was filed prior to Dec. 19, 1970, and proceedings in which a written request for antitrust review of an application for an operating license to be issued under section 104b has been made by a person who intervened or sought by timely written notice to the Atomic Energy Commission to intervene in the construction permit proceeding for the facility to obtain a determination of antitrust considerations or to advance a jurisdictional basis for such determination

[21 FR 355, Jan. 19, 1956, as amended at 35 FR 11461, July 17, 1970; 35 FR 19660, Dec. 29, 1970]

§ 50.43 Additional standards and provisions affecting class 103 licenses for commercial power.

In addition to applying the standards set forth in §§ 50.40 and 50.42, in the case of a class 103 license for a facility for the generation of commercial power:

(a) The Commission will give notice in writing of each application to such regulatory agency as may have jurisdiction over the rates and services incident to the proposed activity; will publish notice of the application in such trade or news publications as it deems appropriate to give reasonable notice to municipalities, private utilities, public bodies, and cooperatives which might have a potential interest in such utilization or production facility; and will publish notice of the application once each week for 4 consecutive weeks in the FEDERAL REGISTER. No license will be issued by the Commission prior to the giving of such notices and until 4 weeks after the last publication in the FEDERAL REGISTER.

(b) If there are conflicting applications for a limited opportunity for such license, the Commission will give preferred consideration in the following order: First, to applications submitted by public or cooperative bodies for facilities to be located in high cost power areas in the United States; second, to applications submitted by others for facilities to be located in such areas; third, to applications submitted by public or cooperative bodies for facilities to be located in other than high cost power areas; and, fourth, to all other applicants.

(c) The licensee who transmits electric energy in interstate commerce, or sells it at wholesale in interstate commerce, shall be subject to the regulatory provisions of the Federal Power Act.

(d) Nothing herein shall preclude any government agency, now or hereafter authorized by law to engage in the production, marketing, or distribution of electric energy, if otherwise qualified, from obtaining a license for the construction and operation of a utilization facility for the primary purpose of producing electric energy for disposition for ultimate public consumption.

[21 FR 355, Jan. 19, 1956, as amended at 35 FR 19660, Dec. 29, 1970]

§ 50.44 Standards for combustible gas control system in light-water-cooled power reactors.

(a) Each boiling or pressurized light-water nuclear power reactor fueled with oxide pellets within cylindrical zircaloy cladding, shall, as provided in paragraphs (b) through (d) of this section, include means for control of hydrogen gas that may be generated, following a postulated loss-of-coolant accident (LOCA) by—

(1) Metal-water reaction involving the fuel cladding and the reactor coolant,

(2) Radiolytic decomposition of the reactor coolant, and

(3) Corrosion of metals.

(b) Each boiling or pressurized light-water nuclear power reactor fueled with oxide pellets within cylindrical zircaloy cladding shall be provided with the capability for

(1) Measuring the hydrogen concentration in the containment,

(2) Insuring a mixed atmosphere in the containment, and

(3) Controlling combustible gas concentrations in the containment following a postulated LOCA.

(c)(1) For each boiling or pressurized light-water nuclear power reactor fueled with oxide pellets within cylindrical zircaloy cladding, it shall be shown that during the time period following a postulated LOCA but prior to effective operation of the combustible gas control system, either:

(i) An uncontrolled hydrogen-oxygen recombination would not take place in the containment; or

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within 25 days after the date of publication in the FEDERAL REGISTER of notice of filing of the application for an operating license or Dec. 19, 1970, whichever is later, the Commission may issue a construction permit or operating license in advance of consideration of and findings with respect to the antitrust aspects of the application, provided that the permit or license so issued contains the condition specified in § 50.55.

(ii) The plant could withstand the consequences of uncontrolled hydrogen-oxygen recombination without loss of safety function.

(2) If the conditions set out in paragraph (c)(1) of this section cannot be shown, the containment shall be provided with an inerted or an oxygen deficient atmosphere in order to provide protection against hydrogen burning and explosions during the time period specified in paragraph (c)(1) of this section.

(3) Notwithstanding paragraphs (c)(1) and (c)(2) of this section:

(i) Effective May 4, 1982 or 6 months after initial criticality, whichever is later, an inerted atmosphere shall be provided for each boiling light-water nuclear power reactor with a Mark I or Mark II type containment; and

(ii) By the end of the first scheduled outage beginning after July 5, 1982 and of sufficient duration to permit required modifications, each light-water nuclear power reactor that relies upon a purge/repressurization system as the primary means for controlling combustible gases following a LOCA shall be provided with either an internal recombiner or the capability to install an external recombiner following the start of an accident. The internal or external recombiners must meet the combustible gas control requirements in paragraph (d) of this section. The containment penetrations used for external recombiners must either be:

(A) Dedicated to that service only, conform to the requirements of Criteria 54 and 56 of Appendix A of this part, be designed against postulated single failures for containment isolation purposes, and be sized to satisfy the flow requirements of the external recombiners, or

(B) Of a combined design for use by either external recombiners or purge/repressurization systems and other systems, conform to the requirements of Criteria 54 and 56 of Appendix A of this part, be designed against postulated single failures both for containment isolation purposes and for operation of the external recombiners or purge/repressurization systems, and be sized to satisfy the flow requirements of the external recombiners or purge repressurization systems.

(iii) To provide improved operational capability to maintain adequate core cooling following an accident, by the end of the first scheduled outage beginning after July 1, 1982 and of sufficient duration to permit required modifications, each light-water nuclear power reactor shall be provided with high point vents for the reactor coolant system, for the reactor vessel head, and for other systems required to maintain adequate core cooling if the accumulation of noncondensible gases would cause the loss of function of these systems. (High point vents are not required, however, for the tubes in U-tube steam generators.) The high point vents must be remotely operated from the control room. Since these vents form a part of the reactor coolant pressure boundary, the design of the vents and associated controls, instruments and power sources must conform to the requirements of Appendix A and Appendix B of this part. In particular, the vent system shall be designed to ensure a low probability that (A) the vents will not perform their safety functions and (B) there would be inadvertent or irreversible actuation of a vent. Furthermore, the use of these vents during and following an accident must not aggravate the challenge to the containment or the course of the accident.

(iv) (A) Each licensee with a boiling light-water nuclear power reactor with a Mark III type of containment and each licensee with a pressurized light-water nuclear power reactor with an ice condenser type of containment issued a construction permit before March 28, 1979, shall provide its nuclear power reactor with a hydrogen control system justified by a suitable program of experiment and analysis. The hydrogen control system must be capable of handling without loss of containment structural integrity an amount of hydrogen equivalent to that generated from a metal-water reaction involving 75% of the fuel cladding surrounding the active fuel region (excluding the cladding surrounding the plenum volume).

(B) Containment structural integrity must be demonstrated by use of an analytical technique that is accepted by the NRC staff. This demonstration must include sufficient supporting justification to show that the technique describes the containment response to the structural loads involved. This method could include the use of actual material properties with suitable margins to account for uncertainties in modeling, in material properties, in construction tolerances, and so on. Another method could include a showing that the following specific criteria of the ASME Boiler and Pressure Vessel Code are met:

(*1*) That steel containments meet the requirements of the ASME Boiler and Pressure Vessel Code (Edition and Addenda as incorporated by reference in § 50.55a(b)(1) of this part), specifically in Section III, Division 1, Subsubarticle NE-3220, Service Level C Limits, considering pressure and dead load alone (evaluation of instability is not required); and

(*2*) That concrete containments meet the requirements of the ASME Boiler and Pressure Vessel Code, Section III, Division 2, Subsubarticle CC-3720, Factored Load Category, considering pressure and dead load alone.

(C) Subsubarticle NE-3220, Divisin 1, and Subsubarticle CC-3720, Division 2, of Section III of the ASME Boiler and Pressure Vessel Code, referenced in paragraphs (c)(3)(iv)(B)(*1*) and (c)(3)(iv)(B)(*2*) of this section, have been approved for incorporation by reference by the Director of the Office of the Federal Register. A notice of any changes made to the material incorporated by reference will be published in the FEDERAL REGISTER. Copies of the ASME Boiler and Pressure Vessel Code may be purchased from the American Society of Mechanical Engineers, United Engineering Center, 345 East 47th Street, New York, N.Y. 10017. It is also available for inspection at the Nuclear Regulatory Commission's Public Document Room, 2120 L Street, NW., Washington, DC.

(D) If the hydrogen control system relies on post-accident inerting, the containment structure must be capable of withstanding the increased pressure.

(*1*) During the accident, where it is acceptable to show that it does not exceed Service Level C Limits or the Factored load Category (as described in paragraph (c)(3)(iv)(B) of this section; and

(*2*) Following inadvertent full inerting during normal plant operations, where it is acceptable to show that it does not exceed either the Service Level A Limits of Subsubarticle NE-3220 (for a steel containment) or the Service Load Category of Subsubarticle CC-3720 (for a concrete containment.)

(*3*) Modest deviations from the criteria in paragraph (c)(3)(iv)(D) of this section will be considered by the Commission if good cause is shown.

(E) If the hydrogen control system relies on post-accident inerting, the systems and components required to establish and maintain safe shutdown and containment integrity must be designed and qualified for the environment caused by such inerting. Furthermore, inadvertent full inerting during normal plant operations must not adversely affect systems and components needed for safe operation of the plant.

(v)(A) Each licensee with a boiling light-water nuclear power reactor with a Mark III type of containment and each licensee with a pressurized light-water nuclear power reactor with an ice condenser type of containment issued a construction permit before March 28, 1979, for a reactor that does not rely upon an inerted atmosphere to control hydrogen inside the containment, shall provide its nuclear power reactor with systems and components necessary to establish and maintain safe shutdown and to maintain containment integrity. These systems and components must be capable of performing their functions during and after exposure to the environmental conditions created by the burning of hydrogen. Environmental conditions caused by local detonations of hydrogen must also be included, unless such detonations can be shown unlikely to occur.

(B) The amount of hydrogen to be considered is equivalent to that generated from a metal-water reaction involving 75% of the fuel cladding surrounding the active fuel region (excluding the cladding surrounding the plenum volume).

(vi)(A) Each applicant for or holder of an operating license for a boiling light-water nulcear power reactor with a Mark III type of containment or for a pressurized light-water nuclear power reactor with an ice condenser type of containment issued a construction permit before March 28, 1979, shall submit an analysis to the Commission as specified in § 50.4.

(B) The analysis required by paragraph (c)(3)(vi)(A) of this section must:

(*1*) Provide an evaluation of the consequences of large amounts of hydrogen generated after the start of an accident (hydrogen resulting from the metal-water reaction of up to and including 75% of the fuel cladding surrounding the active fuel region, excluding the cladding surrounding the plenum volume) and include consideration of hydrogen control measures as appropriate;

(*2*) Include the period of recovery from the degraded condition;

(*3*) Use accident scenarios that are accepted by the NRC staff. These scenarios must be accompanied by sufficient supporting justification to show that they describe the behavior of the reactor system during and following an accident resulting in a degraded core.

(*4*) Support the design of the hydrogen control system selected under paragraph (c)(3)(iv) of this section; and,

(*5*) Show that for those reactors described in paragraph (c)(3)(iv) of this section that do not rely upon an inerted atmosphere to control hydrogen inside the containment:

(*i*) The containment structural integrity as described in paragraph (c)(3)(iv) of this section will be maintained; and

(*ii*) Systems and components necessary to establish and maintain safe shutdown and to maintain containment integrity will be capable of performing their functions during and after exposure to the environmental conditions created by the burning of hydrogen, including the effect of local detonations, unless such detonations can be shown unlikely to occur.

(vii)(A) By June 25, 1985, each applicant for or holder of an operating license subject to the requirements of paragraphs (c)(3) (iv), (v) and (vi) of this section shall develop and submit to the Commission a proposed schedule for meeting these requirements. The schedule may be developed using integrated scheduling systems previously approved for the facility by the NRC.

(B) For each applicant for an operating license as of Febuary 25, 1985, the schedule shall provide for compliance with the requirements of paragraph (c)(3)(iv)(A) of this section prior to operation of the reactor in excess of 5 percent power. Completed final analyses are not necessary for a staff determination that a plant is safe to operate at full power provided that prior to such operation an applicant has provided a preliminary analysis which the staff has determined provides a satisfactory basis for a decision to support interim operation at full power until the final analysis has been completed. However, the record in this rulemaking shows that such preliminary analyses are not necessary for a staff determination that a plant is safe to operate at full power if the staff has determined for similar plants, referenced in this notice of rulemaking, that similar systems provide a satisfactory basis for a decision to support operation at full power until the preliminary analyses have been completed.

(C) For those holders of operating licenses containing license conditions on Hydrogen Control Measures covered by this section, the schedule shall be consistent with those license conditions, or approved amendments thereto.

(D) For those facilities not having an NRC approved integrated scheduling system, a final schedule for meeting the requirements of paragraphs (c)(3) (iv), (v) and (vi) of this section shall be established by the NRC staff within 90 days of receipt of a proposed schedule from the licensee or applicant, taking into account the current status of efforts at the facility to comply with the requirements; analyses that may be provided by applicants or licensees regarding the impacts of these requirements on other scheduled plant modifications, including any NRC-mandated safety modifications, and their relative importance to safety; and the Commission's objective that these requirements be complied with without undue delay.

(d)(1) For facilities that are in compliance with § 50.46(b), the amount of hydrogen contributed by core metal-water reaction (percentage of fuel cladding that reacts with water), as a result of degradation, but not total failure, of emergency core cooling functioning shall be assumed either to be five times the total amount of hydrogen calculated in demonstrating compliance with § 50.46(b)(3), or to be the amount that would result from reaction of all the metal in the outside surfaces of the cladding cylinders surrounding the fuel (excluding the cladding surrounding the plenum volume) to a depth of 0.00023 inch (0.0058 mm), whichever amount is greater. A time period of 2 minutes shall be used as the interval after the postulated LOCA over which the metal-water reaction occurs.

(2) For facilities as to which no evaluation of compliance in accordance with § 50.46(b) has been submitted and evaluated, the amounts of hydrogen so contributed shall be assumed to be that amount resulting from the reaction of 5 percent of the mass of metal in the cladding cylinders surrounding the fuel, excluding the cladding surrounding the plenum volume.

(e) For facilities whose notice of hearing on the application for a construction permit was published on or after November 5, 1970, purging and/or repressurization shall not be the primary means for controlling combustible gases following a LOCA. However, the capability for controlled purging shall be provided. For these facilities, the primary means for controlling combustible gases following a LOCA shall consist of a combustible gas control system, such as recombiners, that does not result in a significant release from containment.

(f) For facilities with respect to which the notice of hearing on the application for a construction permit was published between December 22, 1968, and November 5, 1970, if the incremental radiation dose from purging (and repressurization if a repressurization system is provided) occurring at all points beyond the exclusion area boundary after a postulated LOCA calculated in accordance with § 100.11(a)(2) of this chapter is less than 2.5 rem to the whole body and less than 30 rem to the thyroid, and if the combined radiation dose at the low population zone outer boundary from purging and the postulated LOCA calculated in accordance with § 100.11(a)(2) of this chapter is less than 25 rem to the whole body and less than 300 rem to the thyroid, only a purging system is necessary, provided that the purging system and any filtration system associated with it are designed to conform with the general requirements of Criteria 41, 42, and 43 of Appendix A to this part. Otherwise the facility shall be provided with another type of combustible gas control system (a repressurization system is acceptable) designed to conform with the general requirements of Criteria 41, 42, and 43 of Appendix A to this part. If a purge system is used as part of the repressurization system, the purge system shall be designed to conform with the general requirements of Criteria 41, 42, and 43 of Appendix A to this part. The containment shall not be repressurized beyond 50 percent of the containment design pressure.

(g) For facilities with respect to which the notice of hearing on the application for a construction permit was published on or before December 22, 1968, if the combined radiation dose at the low population zone outer boundary from purging (and repressurization if a repressurization system is provided) and the postulated LOCA calculated in accordance with § 100.11(a)(2) of this chapter is less than 25 rem to the whole body and less than 300 rem to the thyroid, only a purging system is necessary, provided that the purging system and any filtration system associated with it are designed to conform with the general requirements of Criteria 41, 42, and 43 of Appendix A to this part. Otherwise, the facility shall be provided with another type of combustible gas control system (a repressurization system is acceptable) designed to conform with the general requirements of Criteria 41, 42, and 43 of Appendix A to this part. If a purge system is used as part of the repressurization system, it shall be designed to conform with the general requirements of Criteria 41, 42, and 43 of Appendix A to this part. The containment shall not be repressurized beyond 50 percent of the containment design pressure.

(h) As used in this section: (1) Degradation, but not total failure, of emergency core cooling functioning means that the performance of the emergency core cooling system is postulated, for purposes of design of the combustible gas control system, not to meet the acceptance criteria in § 50.46 and that there could be localized clad melting and metal-water reaction to the extent postulated in paragraph (d) of this section. The degree of performance degradation is not postulated to be sufficient to cause core meltdown.

(2) A combustible gas control system is a system that operates after a LOCA to maintain the concentrations of combustible gases within the containment, such as hydrogen, below flammability limits. Combustible gas control systems are of two types: (i) Systems that allow controlled release from containment, through filters if necessary, such as purging systems and repressurization systems, and (ii) systems that do not result in a significant release from containment such as recombiners.

(3) A purging system is a system for the controlled release of the containment atmosphere to the environment through filters if needed.

(4) A repressurization system is a system used to dilute the concentration of combustible gas within containment by adding inert gas or air to the containment. Dilution of the combustible gas results in a delay in time until a flammable concentration is reached and permits fission product decay. Operation is limited to a containment repressurization to 50 percent of the containment design pressure. A purging system is normally part of the repressurization system.

[43 FR 50163, Oct. 27, 1978, as amended at 46 FR 58486, Dec. 2, 1981; 50 FR 3504, Jan. 25, 1985; 50 FR 5567, Feb. 11, 1985; 51 FR 40308, Nov. 6, 1986; 53 FR 43420, Oct. 27, 1988]

§ 50.45 Standards for construction permits.

An applicant for a license or an amendment of a license who proposes to construct or alter a production or utilization facility will be initially granted a construction permit, if the application is in conformity with and acceptable under the criteria of §§ 50.31 through 50.38 and the standards of §§ 50.40 through 50.43.

§ 50.46 Acceptance criteria for emergency core cooling systems for light water nuclear power reactors.

(a)(1)(i) Each boiling and pressurized light-water nuclear power reactor fueled with uranium oxide pellets within cylindrical Zircaloy cladding must be provided with an emergency core cooling system (ECCS) that must be designed such that its calculated cooling performance following postulated loss-of-coolant accidents conforms to the criteria set forth in paragraph (b) of this section. ECCS cooling performance must be calculated in accordance with an acceptable evaluation model and must be calculated for a number of postulated loss-of-coolant accidents of different sizes, locations, and other properties sufficient to provide assurance that the most severe postulated loss-of-coolant accidents are calculated. Except as provided in paragraph (a)(1)(ii) of this section, the evaluation model must include sufficient supporting justification to show that the analytical technique realistically describes the behavior of the reactor system during a loss-of-coolant accident. Comparisons to applicable experimental data must be made and uncertainties in the analysis method and inputs must be identified and assessed so that the uncertainty in the calculated results can be estimated. This uncertainty must be accounted for, so that, when the calculated ECCS cooling performance is compared to the criteria set forth in paragraph (b) of this section, there is a high level of probability that the criteria would not be exceeded. Appendix K, Part II, Required Documentation sets forth the documentation requirements for each evaluation model.

(ii) Alternatively, an ECCS evaluation model may be developed in conformance with the required and acceptable features of Appendix K ECCS Evaluation Models.

(2) The Director of Nuclear Reactor Regulations may impose restrictions on reactor operation if it is found that the evaluations of ECCS cooling performance submitted are not consistent with paragraphs (a)(1) (i) and (ii) of this section.

(3)(i) Each applicant for or holder of an operating license or construction permit shall estimate the effect of any change to or error in an acceptable evaluation model or in the application of such a model to determine if the change or error is significant. For this purpose, a significant change or error is one which results in a calculated peak fuel cladding temperature different by more than 50°F from the temperature calculated for the limiting transient using the last acceptable model, or is a cumulation of changes and errors such that the sum of the absolute magnitudes of the respective temperature changes is greater than 50°F.

(ii) For each change to or error discovered in an acceptable evaluation model or in the application of such a model that affects the temperature calculation, the applicant or licensee shall report the nature of the change or error and its estimated effect on the limiting ECCS analysis to the Commission at least annually as specified in § 50.4. If the change or error is signficant, the applicant or licensee shall provide this report within 30 days and include with the report a proposed schedule for providing a reanalysis or taking other action as may be needed to show compliance with § 50.46 requirements. This schedule may be developed using an integrated scheduling system previously approved for the facility by the NRC. For those facilities not using an NRC approved integrated scheduling system, a schedule will be established by the NRC staff within 60 days of receipt of the proposed schedule. Any change or error correction that results in a calculated ECCS performance that does not conform to the criteria set forth in paragraph (b) of this section is a reportable event as described in §§ 50.55(e), 50.72 and 50.73. The affected applicant or licensee shall propose immediate steps to demonstrate compliance or bring plant design or operation into compliance with § 50.46 requirements.

(b)(1) *Peak cladding temperature.* The calculated maximum fuel element cladding temperature shall not exceed 2200° F.

(2) *Maximum cladding oxidation.* The calculated total oxidation of the cladding shall nowhere exceed 0.17 times the total cladding thickness before oxidation. As used in this subparagraph total oxidation means the total thickness of cladding metal that would be locally converted to oxide if all the oxygen absorbed by and reacted with the cladding locally were converted to stoichiometric zirconium dioxide. If cladding rupture is calculated to occur, the inside surfaces of the cladding shall be included in the oxidation, beginning at the calculated time of rupture. Cladding thickness before oxidation means the radial distance from inside to outside the cladding, after any calculated rupture or swelling has occurred but before significant oxidation. Where the calculated conditions of transient pressure and temperature lead to a prediction of cladding swelling, with or without cladding rupture, the unoxidized cladding thickness shall be defined as the cladding cross-sectional area, taken at a horizontal plane at the elevation of the rupture, if it occurs, or at the elevation of the highest cladding temperature if no rupture is calculated to occur, divided by the average circumference at that elevation. For ruptured cladding the circumference does not include the rupture opening.

(3) *Maximum hydrogen generation.* The calculated total amount of hydrogen generated from the chemical reaction of the cladding with water or steam shall not exceed 0.01 times the hypothetical amount that would be generated if all of the metal in the cladding cylinders surrounding the fuel, excluding the cladding surrounding the plenum volume, were to react.

(4) *Coolable geometry.* Calculated changes in core geometry shall be

such that the core remains amenable to cooling.

(5) *Long-term cooling.* After any calculated successful initial operation of the ECCS, the calculated core temperature shall be maintained at an acceptably low value and decay heat shall be removed for the extended period of time required by the long-lived radioactivity remaining in the core.

(c) As used in this section: (1) Loss-of-coolant accidents (LOCA's) are hypothetical accidents that would result from the loss of reactor coolant, at a rate in excess of the capability of the reactor coolant makeup system, from breaks in pipes in the reactor coolant pressure boundary up to and including a break equivalent in size to the double-ended rupture of the largest pipe in the reactor coolant system.

(2) An evaluation model is the calculational framework for evaluating the behavior of the reactor system during a postulated loss-of-coolant accident (LOCA). It includes one or more computer programs and all other information necessary for application of the calculational framework to a specific LOCA, such as mathematical models used, assumptions included in the programs, procedure for treating the program input and output information, specification of those portions of analysis not included in computer programs, values of parameters, and all other information necessary to specify the calculational procedure.

(d) The requirements of this section are in addition to any other requirements applicable to ECCS set forth in this part. The criteria set forth in paragraph (b), with cooling performance calculated in accordance with an acceptable evaluation model, are in implementation of the general requirements with respect to ECCS cooling performance design set forth in this part, including in particular Criterion 35 of Appendix A.

[39 FR 1002, Jan. 4, 1974, as amended at 53 FR 36004, Sept. 16, 1988]

§ 50.47 Emergency plans.

(a)(1) Except as provided in paragraph (d) of this section, no operating license for a nuclear power reactor will be issued unless a finding is made by NRC that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.

(2) The NRC will base its finding on a review of the Federal Emergency Management Agency (FEMA) findings and determinations as to whether State and local emergency plans are adequate and whether there is reasonable assurance that they can be implemented, and on the NRC assessment as to whether the applicant's onsite emergency plans are adequate and whether there is reasonable assurance that they can be implemented. A FEMA finding will primarily be based on a review of the plans. Any other information already available to FEMA may be considered in assessing whether there is reasonable assurance that the plans can be implemented. In any NRC licensing proceeding, a FEMA finding will constitute a rebuttable presumption on questions of adequacy and implementation capability.

(b) The onsite and, except as provided in paragraph (d) of this section, offsite emergency response plans for nuclear power reactors must meet the following standards:

(1) Primary responsibilities for emergency response by the nuclear facility licensee and by State and local organizations within the Emergency Planning Zones have been assigned, the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.

(2) On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available and the interfaces among various onsite response activities and offsite support and response activities are specified.

(3) Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate State and local staff at the licensee's near-site Emergency Operations Facility have been made, and

other organizations capable of augmenting the planned response have been identified.

(4) A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.

(5) Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all organizations; the content of initial and followup messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established.

(6) Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

(7) Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency (e.g., listening to a local broadcast station and remaining indoors), the principal points of contact with the news media for dissemination of information during an emergency (including the physical location or locations) are established in advance, and procedures for coordinated dissemination of information to the public are established.

(8) Adequate emergency facilities and equipment to support the emergency response are provided and maintained.

(9) Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

(10) A range of protective actions have been developed for the plume exposure pathway EPZ for emergency workers and the public. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

(11) Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.

(12) Arrangments are made for medical services for contaminated injured individuals.

(13) General plans for recovery and reentry are developed.

(14) Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.

(15) Radiological emergency response training is provided to those who may be called on to assist in an emergency.

(16) Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained.

(c)(1) Failure to meet the applicable standards set forth in paragraph (b) of this section may result in the Commission declining to issue an operating license; however, the applicant will have an opportunity to demonstrate to the satisfaction of the Commission that deficiencies in the plans are not significant for the plant in question, that adequate interim compensating actions have been or will be taken promptly, or that there are other compelling reasons to permit plant operations. Where an applicant for an operating license asserts that its inability to demonstrate compliance with the requirements of paragraph (b) of this section results wholly or substantially from the decision of state and/or local governments not to participate further in emergency planning, an operating license may be issued if the applicant demonstrates to the Commission's satisfaction that:

(i) The applicant's inability to comply with the requirements of paragraph (b) of this section is wholly or substantially the result of the nonparticipation of state and/or local governments.

(ii) The applicant has made a sustained, good faith effort to secure and retain the participation of the pertinent state and/or local governmental authorities, including the furnishing of copies of its emergency plan.

(iii) The applicant's emergency plan provides reasonable assurance that public health and safety is not endangered by operation of the facility concerned. To make that finding, the applicant must demonstrate that, as outlined below, adequate protective measures can and will be taken in the event of an emergency. A utility plan will be evaluated against the same planning standards applicable to a state or local plan, as listed in paragraph (b) of this section, with due allowance made both for—

(A) Those elements for which state and/or local non-participation makes compliance infeasible and

(B) The utility's measures designed to compensate for any deficiencies resulting from state and/or local nonparticipation.

In making its determination on the adequacy of a utility plan, the NRC will recognize the reality that in an actual emergency, state and local government officials will exercise their best efforts to protect the health and safety of the public. The NRC will determine the adequacy of that expected response, in combination with the utility's compensating measures, on a case-by-case basis, subject to the following guidance. In addressing the circumstance where applicant's inability to comply with the requirements of paragraph (b) of this section is wholly or substantially the result of non-participation of state and/or local governments, it may be presumed that in the event of an actual radiological emergency state and local officials would generally follow the utility plan. However, this presumption may be rebutted by, for example, a good faith and timely proffer of an adequate and feasible state and/or local radiological emergency plan that would in fact be relied upon in a radiological emergency.

(2) Generally, the plume exposure pathway EPZ for nuclear power plants shall consist of an area about 10 miles (16 km) in radius and the ingestion pathway EPZ shall consist of an area about 50 miles (80 km) in radius. The exact size and configuration of the EPZs surrounding a particular nuclear power reactor shall be determined in relation to local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries. The size of the EPZs also may be determined on a case-by-case basis for gas-cooled nuclear reactors and for reactors with an authorized power level less than 250 MW thermal. The plans for the ingestion pathway shall focus on such actions as are appropriate to protect the food ingestion pathway.

(d) Notwithstanding the requirements of paragraphs (a) and (b) of this section, and except as specified by this paragraph, no NRC or FEMA review, findings, or determinations concerning the state of offsite emergency preparedness or the adequacy of and capability to implement State and local or utility offsite emergency plans are required prior to issuance of an operating license authorizing only fuel loading or low power testing and training (up to 5 percent of the rated power). Insofar as emergency planning and preparedness requirements are concerned, a license authorizing fuel loading and/or low power testing and training may be issued after a finding is made by the NRC that the state of onsite emergency preparedness provides reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. The NRC will base this finding on its assessment of the applicant's onsite emergency plans against the pertinent standards in paragraph (b) of this section and Appendix E. Review of applicant's emergency plans will include the following standards with offsite aspects:

(1) Arrangements for requesting and effectively using offsite assistance on site have been made, arrangements to accommodate State and local staff at the licensee's near-site Emergency Op-

erations Facility have been made, and other organizations capable of augmenting the planned onsite response have been identified.

(2) Procedures have been established for licensee communications with State and local response organizations, including initial notification of the declaration of emergency and periodic provision of plant and response status reports.

(3) Provisions exist for prompt communications among principal response organizations to offsite emergency personnel who would be responding onsite.

(4) Adequate emergency facilities and equipment to support the emergency response onsite are provided and maintained.

(5) Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use onsite.

(6) Arrangements are made for medical services for contaminated and injured onsite individuals.

(7) Radiological emergency response training has been made available to those offsite who may be called to assist in an emergency onsite.

[45 FR 55409, Aug. 8, 1980, as amended at 47 FR 30235, July 13, 1982; 47 FR 40537, Sept. 15, 1982; 49 FR 27736, July 6, 1984; 50 FR 19324, May 8, 1985; 52 FR 42085, Nov. 3, 1987; 53 FR 36959, Sept. 23, 1988]

§ 50.48 Fire protection.

(a) Each operating nuclear power plant must have a fire protection plan that satisfies Criterion 3 of Appendix A of this part. This fire protection plan must describe the overall fire protection program for the facility, identify the various positions within the licensee's organization that are responsible for the program, state the authorities that are delegated to each of these positions to implement those responsibilities, and outline the plans for fire protection, fire detection and suppression capability, and limitation of fire damage. The plan must also describe specific features necessary to implement the program described above, such as administrative controls and personnel requirements for fire prevention and manual fire suppression activities, automatic and manually operated fire detection and suppression systems, and the means to limit fire damage to structures, systems, or components important to safety so that the capability to safely shut down the plant is ensured.[3] The licensee shall retain the fire protection plan and each change to the plan as a record until the Commission terminates the reactor license and shall retain each superseded revision of the procedures for three years from the date it was superseded.

(b) Appendix R to this part establishes fire protection features required to satisfy Criterion 3 of Appendix A to this part with respect to certain generic issues for nuclear power plants licensed to operate prior to January 1, 1979. Except for the requirements of Sections III.G, III.J, and III.O, the provisions of Appendix R to this part shall not be applicable to nuclear power plants licensed to operate prior to January 1, 1979, to the extent that fire protection features proposed or implemented by the licensee have been accepted by the NRC staff as satisfying the provisions of Appendix A to Branch Technical Position BTP APCSB 9.5-1[4] reflected in staff fire

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[3] Basic fire protection guidance for nuclear power plants is contained in two NRC documents:

- Branch Technical Position Auxiliary Power Conversion System Branch BTP APCSB 9.5-1, "Guidelines for Fire Protection for Nuclear Power Plants," for new plants docketed after July 1, 1976, dated May 1976.
- Appendix A to BTP APCSB 9.5-1, "Guidelines for Fire Protection for Nuclear Power Plants Docketed Prior to July 1, 1976," for plants that were operating or under various stages of design or construction before July 1, 1976, dated August 23, 1976.

Also see Note 4.

[4] Clarification and guidance with respect to permissible alternatives to satisfy Appendix A to BTP APCSB 9.5-1 has been provided in four other NRC documents.

"Supplementary Guidance on Information Needed for Fire Protection Evaluation," dated October 21, 1976.

"Sample Technical Specification," dated May 12, 1977.

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protection safety evaluation reports issued prior to the effective date of this rule, or to the extent that fire protection features were accepted by the staff in comprehensive fire protection safety evaluation reports issued before Appendix A to Branch Technical Position BTP APCSB 9.5-1 was published in August 1976. With respect to all other fire protection features covered by Appendix R, all nuclear power plants licensed to operate prior to January 1, 1979 shall satisfy the applicable requirements of Appendix R to this part, including specifically the requirements of Sections III.G, III.J, and III.O.

(c) All fire protection modifications required to satisfy the provisions of Appendix R to this part or directly affected by such requirements shall be completed on the following schedule:

(1) Those fire protection features that involve revisions of administrative controls, manpower changes, and training, shall be implemented within 30 days after the effective date of this section and Appendix R to this part.

(2) Those fire protection features that involve installation of modifications that do not require prior NRC approval or plant shutdown shall be implemented within 9 months after the effective date of this section and Appendix R to this part.

(3) Those fire protection features, except for those requiring prior NRC approval by paragraph (c)(5) of this section, that involve installation of modifications that do require plant shutdown, the need for which is justified in the plans and schedules required by the provisions of paragraph (c)(5) of this section, shall be implemented before startup after the earliest of the following events commencing 180 days or more after the effective date of this section and Appendix R to this part:

(i) The first refueling outage;

(ii) Another planned outage that lasts for at least 60 days; or

(iii) An unplanned outage that lasts for at least 120 days.

(4) Those fire protection features that require prior NRC approval by paragraph (c)(5) of this section, shall be implemented within the following schedule: Dedicated shutdown systems—30 months after NRC approval; modifications requiring plant shutdown—before startup after the earliest of the events given in paragraph (c)(3) commencing 180 days after NRC approval; modifications not requiring plant shutdown—6 months after NRC approval.

(5) Licensees shall make any modifications necessary to comply with these requirements in accordance with the above schedule without prior review and approval by NRC except for modifications required by Section III.G.3 of Appendix R to this part. Licensees shall submit plans and schedules for meeting the provisions of paragraphs (c)(2), (c)(3), and (c)(4) within 30 days after the effective date of this section and Appendix R to this part. Licensees shall submit design descriptions of modifications needed to satisfy Section III.G.3 of Appendix R to this part within 30 days after the the effective date of this section and Appendix R to this part.

(6) In the event that a request for exemption from a requirement to comply with one or more of the provisions of Appendix R filed within 30 days of the effective date of this rule is based on an assertion by the licensee that such required modifications would not enhance fire protection safety in the facility or that such modifications may be detrimental to overall facility safety, the schedule requirements of paragraph (c) shall be tolled until final Commission action on the exemption request upon a determination by the Director of Nuclear Reactor Regulation that the licensee has provided a sound technical basis for such assertion that warrants further staff review of the request.

"Nuclear Plant Fire Protection Functional Responsibilities, Administrative Control and Quality Assurance," dated June 14, 1977.

"Manpower Requirements for Operating Reactors," dated May 11, 1978.

A Fire Protection Safety Evaluation Report that has been issued for each operating plant states how these guidelines were applied to each facility and identifies open fire protection issues that will be resolved when the facility satisfies the appropriate requirements of Appendix R to this part.

(d) Fire protection features accepted by the NRC staff in Fire Protection Safety Evaluation Reports referred to in paragraph (b) of this section and supplements to such reports, other than features covered by paragraph (c), shall be completed as soon as practicable but no later than the completion date currently specified in license conditions or technical specifications for such facility, or the date determined by paragraphs (d)(1) through (d)(4) of this section, whichever is sooner, unless the Director of Nuclear Reactor Regulation determines, upon a showing by the licensee, that there is good cause for extending such date and that the public health and safety is not adversely affected by such extension. Extensions of such date shall not exceed the dates determined by paragraphs (c)(1) through (c)(4) of this section.

(1) Those fire protection features that involve revisions of administrative controls, manpower changes, and training shall be implemented within 4 months after the date of the NRC staff Fire Protection Evaluation Report accepting or requiring such features.

(2) Those fire protection features involving installation of modifications not requiring prior approval or plant shutdown shall be implemented within 12 months after the date of the NRC staff Fire Protection Safety Evaluation Report accepting or requiring such features.

(3) Those fire protection features, including alternative shutdown capability, involving installation of modifications requiring plant shutdown shall be implemented before the startup after the earliest of the following events commencing 9 months or more after the date of the NRC staff Fire Protection Safety Evaluation Report accepting or requiring such features:

(i) The first refueling outage;

(ii) Another planned outage that lasts for at least 60 days; or

(iii) An unplanned outage that lasts for at least 120 days.

(4) Those fire protection features involving dedicated shutdown capability requiring new buildings and systems shall be implemented within 30 months of NRC approval. Other modifications requiring NRC approval prior to installation shall be implemented within 6 months after NRC approval.

(e) Nuclear power plants licensed to operate after January 1, 1979, shall complete all fire protection modifications needed to satisfy Criterion 3 of Appendix A to this part in accordance with the provisions of their licenses.

[45 FR 76610, Nov. 19, 1980, as amended at 53 FR 19250, May 27, 1988]

§ 50.49 Environmental qualification of electric equipment important to safety for nuclear power plants.

(a) Each holder of or each applicant for a license to operate a nuclear power plant shall establish a program for qualifying the electric equipment defined in paragraph (b) of this section.

(b) Electric equipment important to safety covered by this section is:

(1) Safety-related electric equipment:[3] This equipment is that relied upon to remain functional during and following design basis events to ensure (i) the integrity of the reactor coolant pressure boundary, (ii) the capability to shut down the reactor and maintain it in a safe shutdown condition, and (iii) the capability to prevent or mitigate the consequences of accidents that could result in potential offsite exposures comparable to the 10 CFR Part 100 guidelines. Design basis events are defined as conditions of normal operation, including anticipated operational occurrences, design basis accidents, external events, and natural phenomena for which the plant must be designed to ensure functions (i) through (iii) of this paragraph.

(2) Nonsafety-related electric equipment whose failure under postulated environmental conditions could prevent satisfactory accomplishment of safety functions specified in subparagraphs (i) through (iii) of paragraph

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[3] Safety-related electric equipment is referred to as "Class 1E" equipment in IEEE 323-1974. Copies of this standard may be obtained from the Institute of Electrical and Electronics Engineers, Inc., 345 East 47th Street, New York, NY 10017.

(b)(1) of this section by the safety-related equipment.

(3) Certain post-accident monitoring equipment.[4]

(c) Requirements for (1) dynamic and seismic qualification of electric equipment important to safety, (2) protection of electric equipment important to safety against other natural phenomena and external events, and (3) environmental qualification of electric equipment important to safety located in a mild environment are not included within the scope of this section. A mild environment is an environment that would at no time be significantly more severe than the environment that would occur during normal plant operation, including anticipated operational occurrences.

(d) The applicant or licensee shall prepare a list of electric equipment important to safety covered by this section. In addition, the applicant or licensee shall include the information in paragraphs (d)(1), (2), and (3) of this section for this electric equipment important to safety in a qualification file. The applicant or licensee shall keep the list and information in the file current and retain the file in auditable form for the entire period during which the covered item is installed in the nuclear power plant or is stored for future use to permit verification that each item of electric equipment is important to safely meet the requirements of paragraph (j) of this section.

(1) The performance specifications under conditions existing during and following design basis accidents.

(2) The voltage, frequency, load, and other electrical characteristics for which the performance specified in accordance with paragraph (d)(1) of this section can be ensured.

(3) The environmental conditions, including temperature, pressure, humidity, radiation, chemicals, and submergence at the location where the equipment must perform as specified in accordance with paragraphs (d)(1) and (2) of this section.

(e) The electric equipment qualification program must include and be based on the following:

(1) *Temperature and pressure.* The time-dependent temperature and pressure at the location of the electric equipment important to safety must be established for the most severe design basis accident during or following which this equipment is required to remain functional.

(2) *Humidity.* Humidity during design basis accidents must be considered.

(3) *Chemical effects.* The composition of chemicals used must be at least as severe as that resulting from the most limiting mode of plant operation (e.g., containment spray, emergency core cooling, or recirculation from containment sump). If the composition of the chemical spray can be affected by equipment malfunctions, the most severe chemical spray environment that results from a single failure in the spray system must be assumed.

(4) *Radiation.* The radiation environment must be based on the type of radiation, the total dose expected during normal operation over the installed life of the equipment, and the radiation environment associated with the most severe design basis accident during or following which the equipment is required to remain functional, including the radiation resulting from recirculating fluids for equipment located near the recirculating lines and including dose-rate effects.

(5) *Aging.* Equipment qualified by test must be preconditioned by natural or artificial (accelerated) aging to its end-of-installed life condition. Consideration must be given to all significant types of degradation which can have an effect on the functional capability of the equipment. If preconditioning to an end-of-installed life condition is not practicable, the equipment may be preconditioned to a shorter designated life. The equipment must be replaced or refurbished at the end of this desig-

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[4] Specific guidance concerning the types of variables to be monitored is provided in Revision 2 of Regulatory Guide 1.97, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident." Copies of the Regulatory Guide may be purchased through the U.S. Government Printing Office by calling 202-275-2060 or by writing to the U.S. Government Printing Office, P.O. Box 37082, Washington, DC 20013-7082.

nated life unless ongoing qualification demonstrates that the item has additional life.

(6) *Submergence* (if subject to being submerged).

(7) *Synergistic effects.* Synergistic effects must be considered when these effects are believed to have a significant effect on equipment performance.

(8) *Margins.* Margins must be applied to account for unquantified uncertainty, such as the effects of production variations and inaccuracies in test instruments. These margins are in addition to any conservatisms applied during the derivation of local environmental conditions of the equipment unless these conservatisms can be quantified and shown to contain appropriate margins.

(f) Each item of electric equipment important to safety must be qualified by one of the following methods:

(1) Testing an identical item of equipment under identical conditions or under similar conditions with a supporting analysis to show that the equipment to be qualified is acceptable.

(2) Testing a similar item of equipment with a supporting analysis to show that the equipment to be qualified is acceptable.

(3) Experience with identical or similar equipment under similar conditions with a supporting analysis to show that the equipment to be qualified is acceptable.

(4) Analysis in combination with partial type test data that supports the analytical assumptions and conclusions.

(g) Each holder of an operating license issued prior to February 22, 1983, shall, by May 20, 1983, identify the electric equipment important to safety within the scope of this section already qualified and submit a schedule for either the qualification to the provisions of this section or for the replacement of the remaining electric equipment important to safety within the scope of this section. This schedule must establish a goal of final environmental qualification of the electric equipment within the scope of this section by the end of the second refueling outage after March 31, 1982 or by March 31, 1985, whichever is earlier. The Director of the Office of Nuclear Reactor Regulation may grant requests for extensions of this deadline to a date no later than November 30, 1985, for specific pieces of equipment if these requests are filed on a timely basis and demonstrate good cause for the extension, such as procurement lead time, test complications, and installation problems. In exceptional cases, the Commission itself may consider and grant extensions beyond November 30, 1985, for completion of environmental qualification.

The schedule in this paragraph supersedes the June 30, 1982, deadline, or any other previously imposed date, for environmental qualification of electric equipment contained in certain nuclear power operating licenses.

(h) Each license shall notify the Commission as specified in § 50.4 of any significant equipment qualification problem that may require extension of the completion date provided in accordance with paragraph (g) of this section within 60 days of its discovery.

(i) Applicants for operating licenses granted after February 22, 1983, but prior to November 30, 1985, shall perform an analysis to ensure that the plant can be safely operated pending completion of equipment qualification required by this section. This analysis must be submitted, as specified in § 50.4, for consideration prior to the granting of an operating license and must include, where appropriate, consideration of:

(1) Accomplishing the safety function by some designated alternative equipment if the principal equipment has not been demonstrated to be fully qualified.

(2) The validity of partial test data in support of the original qualification.

(3) Limited use of administrative controls over equipment that has not been demonstrated to be fully qualified.

(4) Completion of the safety function prior to exposure to the accident environment resulting from a design basis event and ensuring that the subsequent failure of the equipment does

not degrade any safety function or mislead the operator.

(5) No significant degradation of any safety function or misleading information to the operator as a result of failure of equipment under the accident environment resulting from a design basis event.

(j) A record of the qualification, including documentation in paragraph (d) of this section, must be maintained in an auditable form for the entire period during which the covered item is installed in the nuclear power plant or is stored for future use to permit verification that each item of electric equipment important to safety covered by this section:

(1) Is qualified for its application; and

(2) Meets its specified performance requirements when it is subjected to the conditions predicted to be present when it must perform its safety function up to the end of its qualified life.

(k) Applicants for and holders of operating licenses are not required to requalify electric equipment important to safety in accordance with the provisions of this section if the Commission has previously required qualification of that equipment in accordance with "Guidelines for Evaluating Environmental Qualification of Class 1E Electrical Equipment in Operating Reactors," November 1979 (DOR Guidelines), or NUREG-0588 (For Comment version), "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment."

(l) Replacement equipment must be qualified in accordance with the provisions of this section unless there are sound reasons to the contrary.

[48 FR 2733, Jan. 21, 1983, as amended at 49 FR 45576, Nov. 19, 1984; 51 FR 40308, Nov. 6, 1986; 51 FR 43709, Dec. 3, 1986; 52 FR 31611, Aug. 21, 1987; 53 FR 19250, May 27, 1988]

ISSUANCE, LIMITATIONS, AND CONDITIONS OF LICENSES AND CONSTRUCTION PERMITS

§ 50.50 Issuance of licenses and construction permits.

Upon determination that an application for a license meets the standards and requirements of the act and regulations, and that notifications, if any, to other agencies or bodies have been duly made, the Commission will issue a license, or if appropriate a construction permit, in such form and containing such conditions and limitations including technical specifications, as it deems appropriate and necessary.

§ 50.51 Duration of license, renewal.

Each license will be issued for a fixed period of time to be specified in the license but in no case to exceed 40 years from the date of issuance. Where the operation of a facility is involved the Commission will issue the license for the term requested by the applicant or for the estimated useful life of the facility if the Commission determines that the estimated useful life is less than the term requested. Where construction of a facility is involved, the Commission may specify in the construction permit the period for which the license will be issued if approved pursuant to § 50.56. Licenses may be renewed by the Commission upon the expiration of the period. Application for termination of license is to be made pursuant to § 50.82.

[53 FR 24049, June 27, 1988]

§ 50.52 Combining licenses.

The Commission may combine in a single license the activities of an applicant which would otherwise be licensed severally.

§ 50.53 Jurisdictional limitations.

No license under this part shall be deemed to have been issued for activities which are not under or within the jurisdiction of the United States.

[21 FR 355, Jan. 19, 1956, as amended at 43 FR 6924, Feb. 17, 1978]

§ 50.54 Conditions of licenses.

Whether stated therein or not, the following shall be deemed conditions in every license issued:

(a)(1) Each nuclear power plant or fuel reprocessing plant licensee subject to the quality assurance criteria in Appendix B of this part shall implement, pursuant to § 50.34(b)(6)(ii) of this part, the quality assurance program described or referenced in the

Safety Analysis Report, including changes to that report.

(2) Each licensee described in paragraph (a)(1) of this section shall, by June 10, 1983, submit to the appropriate NRC Regional Office shown in Appendix D of Part 20 of this chapter the current description of the quality assurance program it is implementing for inclusion in the Safety Analysis Report, unless there are no changes to the description previously accepted by NRC. This submittal must identify changes made to the quality assurance program description since the description was submitted to NRC. (Should a licensee need additional time beyond June 10, 1983 to submit its current quality assurance program description to NRC, it shall notify the appropriate NRC Regional Office in writing, explain why additional time is needed, and provide a schedule for NRC approval showing when its current quality assurance program description will be submitted.)

(3) After March 11, 1983, each licensee described in paragraph (a)(1) of this section may make a change to a previously accepted quality assurance program description included or referenced in the Safety Analysis Report, provided the change does not reduce the commitments in the program description previously accepted by the NRC. Changes to the quality assurance program description that do not reduce the commitments must be submitted to the NRC at least annually in accordance with the requirements of § 50.71. Changes to the quality assurance program description that do reduce the commitments must be submitted to NRC and receive NRC approval prior to implementation, as follows:

(i) Changes made to the Safety Analysis Report must be submitted, as specified in § 50.4. Changes made to NRC-accepted quality assurance topical report descriptions must be submitted, as specified in § 50.4.

(ii) The submittal of a change to the Safety Analysis Report quality assurance program description must include all pages affected by that change and must be accompanied by a forwarding letter identifying the change, the reason for the change, and the basis for concluding that the revised program incorporating the change continues to satisfy the criteria of Appendix B of this part and the Safety Analysis Report quality assurance program description commitments previously accepted by the NRC (the letter need not provide the basis for changes that correct spelling, punctuation, or editorial items).

(iii) A copy of the forwarding letter identifying the changes must be maintained as a facility record for three years.

(iv) Changes to the quality assurance program description included or referenced in the Safety Analysis Report shall be regarded as accepted by the Commission upon receipt of a letter to this effect from the appropriate reviewing office of the Commission or 60 days after submittal to the Commission, whichever occurs first.

(b) No right to the special nuclear material shall be conferred by the license except as may be defined by the license.

(c) Neither the license, nor any right thereunder, nor any right to utilize or produce special nuclear material shall be transferred, assigned, or disposed of in any manner, either voluntarily or involuntarily, directly or indirectly, through transfer of control of the license to any person, unless the Commission shall, after securing full information, find that the transfer is in accordance with the provisions of the act and give its consent in writing.

(d) The license shall be subject to suspension and to the rights of recapture of the material or control of the facility reserved to the Commission under section 108 of the act in a state of war or national emergency declared by Congress.

(e) The license shall be subject to revocation, suspension, modification, or amendment for cause as provided in the act and regulations, in accordance with the procedures provided by the act and regulations.

(f) The licensee shall at any time before expiration of the license, upon request of the Commission, submit, as specified in § 50.4, written statements, signed under oath or affirmation, to enable the Commission to determine whether or not the license should be modified, suspended, or revoked. Except for information sought to verify licensee compliance with the current licensing basis for that facility, the NRC must prepare the reason or reasons for each information request prior to issuance to ensure that the burden to be imposed on respondents is justified in view of the potential safety significance of the issue to be addressed in the requested information. Each such justification provided for an evaluation performed by the NRC staff must be approved by the Executive Director for Operations or his or her designee prior to issuance of the request.

(g) The issuance or existence of the license shall not be deemed to waive, or relieve the licensee from compliance with, the antitrust laws, as specified in subsection 105a of the Act. In the event that the licensee should be found by a court of competent jurisdiction to have violated any provision of such antitrust laws in the conduct of the licensed activity, the Commission may suspend or revoke the license or take such other action with respect to it as shall be deemed necessary.

(h) The license shall be subject to the provisions of the Act now or hereafter in effect and to all rules, regulations, and orders of the Commission. The terms and conditions of the license shall be subject to amendment, revision, or modification, by reason of amendments of the Act or by reason of rules, regulations, and orders issued in accordance with the terms of the act.

(i) Except as provided in § 55.13 of this chapter, the licensee may not permit the manipulation of the controls of any facility by anyone who is not a licensed operator or senior operator as provided in Part 55 of this chapter.

(i-1) Within three months after iss
ance of an operating license, the
censee shall have in effect an operat
requalification program which must
a minimum, meet the requirements
§ 55.59(c) of this chapter. Notwit
standing the provisions of § 50.59, t
licensee may not, except as specifical
authorized by the Commission d
crease the scope of an approved oper
tor requalification program.

(j) Apparatus and mechanisms oth
than controls, the operation of whi
may affect the reactivity or pow
level of a reactor shall be manipulat
only with the knowledge and conse
of an operator or senior operator
censed pursuant to Part 55 of th
chapter present at the controls.

(k) An operator or senior operator
censed pursuant to Part 55 of th
chapter shall be present at the co
trols at all times during the operati
of the facility.

(l) The licensee shall designate ind
viduals to be responsible for directi
the licensed activities of licensed ope
ators. These individuals shall be
censed as senior operators pursuant
Part 55 of this chapter.

(m)(1) A senior operator licens
pursuant to Part 55 of this chapt
shall be present at the facility or rea
ily available on call at all times duri
its operation, and shall be present
the facility during initial start-up a
approach to power, recovery from
unplanned or unscheduled shut-dow
or significant reduction in power, a
refueling, or as otherwise prescribed
the facility license.

(2) Notwithstanding any other pro
sions of this section, by January
1984, licensees of nuclear power un
shall meet the following requiremen

(i) Each licensee shall meet the min
mum licensed operator staffing
quirements in the following table:

MINIMUM REQUIREMENTS [1] PER SHIFT FOR ON-SITE STAFFING OF NUCLEAR POWER UNITS BY OPERATORS AND SENIOR OPERATORS LICENSED UNDER 10 CFR PART 55

Number of nuclear power units operating [2]	Position	One unit	Two units		Three units	
		One control room	One control room	Two control rooms	Two control rooms	Thr con roo
None	Senior Operator	1	1	1	1	
	Operator	1	2	2	3	

MINIMUM REQUIREMENTS [1] PER SHIFT FOR ON-SITE STAFFING OF NUCLEAR POWER UNITS BY OPERATORS AND SENIOR OPERATORS LICENSED UNDER 10 CFR PART 55—Continued

Number of nuclear power units operating [2]	Position	One unit	Two units		Three units	
		One control room	One control room	Two control rooms	Two control rooms	Three control rooms
One	Senior Operator	2	2	2	2	2
	Operator	2	3	3	4	4
Two	Senior Operator		2	3	[3] 3	3
	Operator		3	4	[3] 5	5
Three	Senior Operator				3	4
	Operator				5	6

[1] Temporary deviations from the numbers required by this table shall be in accordance with criteria established in the unit's technical specifications.

[2] For the purpose of this table, a nuclear power unit is considered to be operating when it is in a mode other than cold shutdown or refueling as defined by the unit's technical specifications.

[3] The number of required licensed personnel when the operating nuclear power units are controlled from a common control room are two senior operators and four operators.

(ii) Each licensee shall have at its site a person holding a senior operator license for all fueled units at the site who is assigned responsibility for overall plant operation at all times there is fuel in any unit. If a single senior operator does not hold a senior operator license on all fueled units at the site, then the licensee must have at the site two or more senior operators, who in combination are licensed as senior operators on all fueled units.

(iii) When a nuclear power unit is in an operational mode other than cold shutdown or refueling, as defined by the unit's technical specifications, each licensee shall have a person holding a senior operator license for the nuclear power unit in the control room at all times. In addition to this senior operator, for each fueled nuclear power unit, a licensed operator or senior operator shall be present at the controls at all times.

(iv) Each licensee shall have present, during alteration of the core of a nuclear power unit (including fuel loading or transfer), a person holding a senior operator license or a senior operator license limited to fuel handling to directly supervise the activity and, during this time, the licensee shall not assign other duties to this person.

(3) Licensees who cannot meet the January 1, 1984 deadline must submit by October 1, 1983 a request for an extension to the Director of the Office of Nuclear Regulation and demonstrate good cause for the request.

(n) The licensee shall not, except as authorized pursuant to a construction permit, make any alteration in the facility constituting a change from the technical specifications previously incorporated in a license or construction permit pursuant to § 50.36 of this part.

(o) Primary reactor containments for water cooled power reactors shall be subject to the requirements set forth in Appendix J to this part.

(p)(1) The licensee shall prepare and maintain safeguards contingency plan procedures in accordance with Appendix C of Part 73 of this chapter for effecting the actions and decisions contained in the Responsibility Matrix of the safeguards contingency plan. The licensee may make no change which would decrease the effectiveness of a security plan, or guard training and qualification plan, prepared pursuant to § 50.34(c) or Part 73 of this chapter, or of the first four categories of information (Background, Generic Planning Base, Licensee Planning Base, Responsibility Matrix) contained in a licensee safeguards contingency plan prepared pursuant to § 50.34(d) or Part 73 of this chapter, as applicable, without prior approval of the Commission. A licensee desiring to make such a change shall submit an application for an amendment to the licensee's license pursuant to § 50.90.

(2) The licensee may make changes to the plans referenced in paragraph (p)(1) of this section, without prior Commission approval if the changes do not decrease the safeguards effec-

tiveness of the plan. The licensee shall maintain records of changes to the plans made without prior Commission approval for a period of three years from the date of the change, and shall submit, as specified in § 50.4, a report containing a description of each change within two months after the change is made. Prior to the safeguards contingency plan being put into effect, the licensee shall have:

(i) All safeguards capabilities specified in the safeguards contingency plan available and functional,

(ii) Detailed procedures developed according to Appendix C to Part 73 available at the licensee's site, and

(iii) All appropriate personnel trained to respond to safeguards incidents as outlined in the plan and specified in the detailed Procedures.

(3) The licensee shall provide for the development, revision, implementation, and maintanence of its safeguards contingency plan. To this end, the licensee shall provide for a review at least every 12 months of the safeguards contingency plan by individuals independent of both security program management and personnel who have direct responsibility for implementation of the security program. The review must include a review and audit of safeguards contingency procedures and practices, an audit of the security system testing and maintenance program, and a test of the safeguards systems along with commitments established for response by local law enforcement authorities. The results of the review and audit, along with recommendations for improvements, must be documented, reported to the licensee's corporate and plant management, and kept available at the plant for inspection for a period of two years.

(q) A licensee authorized to possess and operate a nuclear power reactor shall follow and maintain in effect emergency plans which meet the standards in § 50.47(b) and the requirements in Appendix E of this part. A licensee authorized to possess and/or operate a research reactor or a fuel facility shall follow and maintain in effect emergency plans which meet the requirements in Appendix E to this part. The licensee shall retain the emergency plan and each change that decreases the effectiveness of the plan as a record until the Commission terminates the license for the nuclear power reactor. The nuclear power reactor licensee may make changes to these plans without Commission approval only if the changes do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the standards of § 50.47(b) and the requirements of Appendix E to this part. The research reactor and/or the fuel facility licensee may make changes to these plans without Commission approval only if these changes do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the requirements of Appendix E to this part. This nuclear power reactor, research reactor, or fuel facility licensee shall retain a record of each change to the emergency plan made without prior Commission approval for a period of three years from the date of the change. Proposed changes that decrease the effectiveness of the approved emergency plans may not be implemented without application to and approval by the Commission. The licensee shall submit, as specified in § 50.4, a report of each proposed change for approval. If a change is made without approval, the licensee shall submit, as specified in § 50.4, a report of each change within 30 days after the change is made.

(r) Each licensee who is authorized to possess and/or operate a research or test reactor facility with an authorized power level greater than or equal to 2 MW thermal, under a licensee of the type specified in § 50.21(c), shall submit emergency plans complying with 10 CFR Part 50, Appendix E, to the Director of the Office of Nuclear Reactor Regulation for approval by September 7, 1982. Each licensee who is authorized to possess and/or operate a research or test reactor facility with an authorized power level less than 2 MW thermal, under a license of the type specified in § 50.21(c), shall submit emergency plans complying with 10 CFR Part 50, Appendix E, to the Director of the Office of Nuclear Reactor Regulation for approval by November 3, 1982.

(s)(1) Each licensee who is authorized to possess and/or operate a nuclear power reactor shall submit to NRC within 60 days of the effective date of this amendment the radiological emergency response plans of State and local governmental entities in the United States that are wholly or partially within a plume exposure pathway EPZ, as well as the plans of State governments wholly or partially within an ingestion pathway EPZ.[1,2] Ten (10) copies of the above plans shall be forwarded to the Administrator of Nuclear Reactor Regulation with 3 copies to the Director of the appropriate NRC regional office. Generally, the plume exposure pathway EPZ for nuclear power reactors shall consist of an area about 10 miles (16 km) in radius and the ingestion pathway EPZ shall consist of an area about 50 miles (80 km) in radius. The exact size and configuration of the EPZs for a particular nuclear power reactor shall be determined in relation to local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries. The size of the EPZs also may be determined on a case-by-case basis for gas-cooled nuclear reactors and for reactors with an authorized power level less than 250 MW thermal. The plans for the ingestion pathway EPZ shall focus on such actions as are appropriate to protect the food ingestion pathway.

(2)(i) For operating power reactors, the licensee, State, and local emergency response plans shall be implemented by April 1, 1981, except as provided in Section IV.D.3 of Appendix E to this part.

(ii) If after April 1, 1981, the NRC finds that the state of emergency preparedness does not provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency (*including findings based on requirements of Appendix E, Section IV.D.3*) and if the deficiencies (*including deficiencies based on requirements of Appendix E, Section IV.D.3*) are not corrected within four months of that finding, the Commission will determine whether the reactor shall be shut down until such deficiencies are remedied or whether other enforcement action is appropriate. In determining whether a shutdown or other enforcement action is appropriate, the Commission shall take into account, among other factors, whether the licensee can demonstrate to the Commission's satisfaction that the deficiencies in the plan are not significant for the plant in question, or that adequate interim compensating actions have been or will be taken promptly, or that that there are other compelling reasons for continued operation.

(3) The NRC will base its finding on a review of the FEMA findings and determinations as to whether State and local emergency plans are adequate and capable of being implemented, and on the NRC assessment as to whether the licensee's emergency plans are adequate and capable of being implemented. Nothing in this paragraph shall be construed as limiting the authority of the Commission to take action under any other regulation or authority of the Commission or at any time other than that specified in this paragraph.

(t) A nuclear power reactor licensee shall provide for the development, revision, implementation, and maintenance of its emergency preparedness program. To this end, the licensee shall provide for a review of its emergency preparedness program at least every 12 months by persons who have no direct responsibility for implementation of the emergency preparedness program. The review shall include an evaluation for adequacy of interfaces with State and local governments and of licensee drills, exercises, capabilities, and procedures. The results of

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[1] Emergency Planning Zones (EPZs) are discussed in NUREG-0396; EPA 520/1-78-016, "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants," December 1978.

[2] If the State and local emergency response plans have been previously provided to the NRC for inclusion in the facility docket, the applicant need only provide the appropriate reference to meet this requirement.

the review, along with recommendations for improvements, shall be documented, reported to the licensee's corporate and plant management, and retained for a period of five years. The part of the review involving the evaluation for adequacy of interface with State and local governments shall be available to the appropriate State and local governments.

(u) Within 60 days after the effective date of this amendment, each nuclear power reactor licensee shall submit to the NRC plans for coping with emergencies that meet standards in § 50.47(b) and the requirements of Appendix E to this part.

(v) Each licensee subject to the requirements of Part 73 of this chapter shall ensure that physical security, safeguards contingency and guard qualification and training plans and other related Safeguards Information are protected against unauthorized disclosure in accordance with the requirements of § 73.21 of this chapter, as appropriate.

(w) Each electric utility licensee under this part for a production or utilization facility of the type described in § 50.21(b) or § 50.22 shall take reasonable steps to obtain insurance available at reasonable costs and on reasonable terms from private sources or to demonstrate to the satisfaction of the Commission that it possesses an equivalent amount of protection covering the licensee's obligation, in the event of an accident at the licensee's reactor, to stabilize and decontaminate the reactor and the reactor station site at which the reactor experiencing the accident is located, provided that:

(1) The insurance required by paragraph (w) of this section must have a minimum coverage limit for each reactor station site of either $1.06 billion or whatever amount of insurance is generally available from private sources, whichever is less. The required insurance must clearly state that, as and to the extent provided in paragraph (w)(4) of this section, any proceeds must be payable first for stabilization of the reactor and next for decontamination of the reactor and the reactor station site. If a licensee's coverage falls below the required minimum, the licensee shall within 60 days take all reasonable steps to restore its coverage to the required minimum. The required insurance may, at the option of the licensee, be included within policies that also provide coverage for other risks, including, but not limited to, the risk of direct physical damage.

(2)(i) With respect to policies issued or annually renewed on or after April 2, 1991, the proceeds of such required insurance must be dedicated, as and to the extent provided in this paragraph, to reimbursement or payment on behalf of the insured of reasonable expenses incurred or estimated to be incurred by the licensee in taking action to fulfill the licensee's obligation, in the event of an accident at the licensee's reactor, to ensure that the reactor is in, or is returned to, and maintained in, a safe and stable condition and that radioactive contamination is removed or controlled such that personnel exposures are consistent with the occupational exposure limits in 10 CFR part 20. These actions must be consistent with any other obligation the licensee may have under this chapter and must be subject to paragraph (w)(4) of this section. As used in this section, an "accident" means an event that involves the release of radioactive material from its intended place of confinement within the reactor or on the reactor station site such that there is a present danger of release off site in amounts that would pose a threat to the public health and safety.

(ii) The stabilization and decontamination requirements set forth in paragraph (w)(4) of this section must apply uniformly to all insurance policies required under paragraph (w) of this section.

(3) The licensee shall report to the NRC on April 1 of each year the current levels of this insurance or financial security it maintains and the sources of this insurance or financial security.

(4)(i) In the event of an accident at the licensee's reactor, whenever the estimated costs of stabilizing the licensed reactor and of decontaminating the reactor and the reactor station site exceed $100 million, the proceeds of the insurance required by paragraph

w) of this section must be dedicated o and used, first, to ensure that the li-ensed reactor is in, or is returned to, nd can be maintained in, a safe and table condition so as to prevent any significant risk to the public health nd safety and, second, to decontamiate the reactor and the reactor staion site in accordance with the licensee's cleanup plan as approved by order f the Director of the Office of Nucler Reactor Regulation. This priority n insurance proceeds must remain in ffect for 60 days or, upon order of the Director, for such longer periods, in inrements not to exceed 60 days except s provided for activities under the leanup plan required in paragraphs w)(4)(iii) and (w)(4)(iv) of this secion, as the Director may find necesary to protect the public health and afety. Actions needed to bring the rector to and maintain the reactor in a afe and stable condition may include ne or more of the following, as approriate: (A) Shutdown of the reactor; B) Establishment and maintenance of ong-term cooling with stable decay eat removal; (C) Maintenance of subriticality; (D) Control of radioactive eleases; and (E) Securing of strucures, systems, or components to mininize radiation exposure to onsite peronnel or to the offsite public or to failitate later decontamination or both.

(ii) The licensee shall inform the Diector of the Office of Nuclear Reacor Regulation in writing when the rector is and can be maintained in a afe and stable condition so as to preent any significant risk to the public ealth and safety. Within 30 days fter the licensee informs the Director hat the reactor is in this condition, or t such earlier time as the licensee nay elect or the Director may for ood cause direct, the licensee shall repare and submit a cleanup plan for he Director's approval. The cleanup lan must identify and contain an estinate of the cost of each cleanup opertion that will be required to deconaminate the reactor sufficiently to ermit the licensee either to resume peration of the reactor or to apply to he Commission under § 50.82 for auhority to decommission the reactor nd to surrender the license voluntariy. Cleanup operations may include one or more of the following, as appropriate: (A) Processing any contaminated water generated by the accident and by decontamination operations to remove radioactive materials; (B) Decontamination of surfaces inside the auxiliary and fuel-handling buildings and the reactor building to levels consistent with the Commission's occupational exposure limits in 10 CFR part 20, and decontamination or disposal of equipment; (C) Decontamination or removal and disposal of internal parts and damaged fuel from the reactor vessel; and (D) Cleanup of the reactor coolant system.

(iii) Following review of the licensee's cleanup plan, the Director will order the licensee to complete all operations that the Director finds are necessary to decontaminate the reactor sufficiently to permit the licensee either to resume operation of the reactor or to apply to the Commission under § 50.82 for authority to decommission the reactor and to surrender the license voluntarily. The Director shall approve or disapprove, in whole or in part for stated reasons, the licensee's estimate of cleanup costs for such operations. Such order may not be effective for more than 1 year, at which time it may be renewed. Each subsequent renewal order, if imposed, may be effective for not more than 6 months.

(iv) Of the balance of the proceeds of the required insurance not already expended to place the reactor in a safe and stable condition pursuant to paragraph (w)(2)(i) of this section, an amount sufficient to cover the expenses of completion of those decontamination operations that are the subject of the Director's order shall be dedicated to such use, provided that, upon certification to the Director of the amounts expended previously and from time to time for stabilization and decontamination and upon further certification to the Director as to the sufficiency of the dedicated amount remaining, policies of insurance may provide for payment to the licensee or other loss payees of amounts not so dedicated, and the licensee may proceed to use in parallel (and not in preference thereto) any insurance proceeds not so dedicated for other purposes.

(x) A licensee may take reasonable action that departs from a license condition or a technical specification (contained in a license issued under this part) in an emergency when this action is immediately needed to protect the public health and safety and no action consistent with license conditions and technical specifications that can provide adequate or equivalent protection is immediately apparent.

(y) Licensee action permitted by paragraph (x) of this section shall be approved, as a minimum, by a licensed senior operator prior to taking the action.

(z) Each licensee with a utilization facility licensed pursuant to sections 103 or 104b. of the Act shall immediately notify the NRC Operations Center of the occurrence of any event specified in § 50.72 of this part.

(aa) The license shall be subject to all conditions deemed imposed as a matter of law by sections 401(a)(2) and 401(d) of the Federal Water Pollution Control Act, as amended (33 U.S.C.A. 1341(a)(2) and (d).)

(bb) For operating nuclear power reactors, the licensee shall, no later than 5 years before expiration of the reactor operating license, submit written notification to the Commission for its review and preliminary approval of the program by which the licensee intends to manage and provide funding for the management of all irradiated fuel at the reactor upon expiration of the reactor operating license until title to the irradiated fuel and possession of the fuel is transferred to the Secretary of Energy for its ultimate disposal in a repository. Final Commission review will be undertaken as part of any proceeding for continued licensing under Part 50 or Part 72. The licensee must demonstrate to NRC that the elected actions will be consistent with NRC requirements for licensed possession of irradiated nuclear fuel and that the actions will be implemented on a timely basis. Where implementation of such actions require NRC authorizations, the licensee shall verify in the notification that submittals for such actions have been or will be made to NRC and shall identify them. A copy of the notification shall be retained by the licensee as a record until expiration of the reactor operating license. The licensee shall notify the NRC of any significant changes in the proposed waste management program as described in the initial notification.

(cc)(1) Each licensee shall notify the appropriate NRC Regional Administrator, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any Chapter of Title 11 (Bankruptcy) of the United States Code by or against:

(i) The licensee;

(ii) An entity (as that term is defined in 11 U.S.C. 101(14)) controlling the licensee or listing the license or licensee as property of the estate; or

(iii) An affiliate (as that term is defined in 11 U.S.C. 101(2)) of the licensee.

(2) This notification must indicate:

(i) The bankruptcy court in which the petition for bankruptcy was filed; and

(ii) The date of the filing of the petition.

(dd) A licensee may take reasonable action that departs from a license condition or a technical specification (contained in a license issued under this part) in a national security emergency:

(1) When this action is immediately needed to implement national security objectives as designated by the national command authority through the Commission, and

(2) No action consistent with license conditions and technical specifications that can meet national security objectives is immediately apparent.

A national security emergency is established by a law enacted by the Congress or by an order or directive issued by the President pursuant to statutes or the Constitution of the United States. The authority under this paragraph must be exercised in accordance with law, including section 57e of the Act, and is in addition to the authority granted under paragraph (x) of this section, which remains in effect unless otherwise directed by the Commission during a national security emergency.

[21 FR 355, Jan. 19, 1956, as amended at 28 FR 3197, Apr. 3, 1963]
1990]

EDITORIAL NOTE: For additional FEDERAL REGISTER citations affecting § 50.54, see the List of CFR Sections Affected in the Finding Aids section of this volume.

§ 50.55 Conditions of construction permits.

Each construction permit shall be subject to the following terms and conditions:

(a) The permit shall state the earliest and latest dates for completion of the construction or modification.

(b) If the proposed construction or modification of the facility is not completed by the latest completion date, the permit shall expire and all rights thereunder shall be forfeited: *Provided, however,* That upon good cause shown the Commission will extend the completion date for a reasonable period of time. The Commission will recognize, among other things, developmental problems attributable to the experimental nature of the facility or fire, flood, explosion, strike, sabotage, domestic violence, enemy action, an act of the elements, and other acts beyond the control of the permit holder, as a basis for extending the completion date.

(c) Except as modified by this section and § 50.55a, the construction permit shall be subject to the same conditions to which a license is subject.

(d) At or about the time of completion of the construction or modification of the facility, the applicant will file any additional information needed to bring the original application for license up to date, and will file an application for an operating license or an amendment to an application for a license to construct and operate the facility for the issuance of an operating license, as appropriate, as specified in § 50.30(d) of this part.

(e)(1) If the permit is for construction of a nuclear power plant, the holder of the permit shall notify the Commission of each deficiency found in design and construction, which, were it to have remained uncorrected, could have affected adversely the safety of operations of the nuclear power plant at any time throughout the expected lifetime of the plant, and which represents:

(i) A significant breakdown in any portion of the quality assurance program conducted in accordance with the requirements of Appendix B to this part; or

(ii) A significant deficiency in final design as approved and released for construction such that the design does not conform to the criteria and bases stated in the safety analysis report or construction permit; or

(iii) A significant deficiency in construction of or significant damage to a structure, system, or component which will require extensive evaluation, extensive redesign, or extensive repair to meet the criteria and bases stated in the safety analysis report or construction permit or to otherwise establish the adequacy of the structure, system, or component to perform its intended safety function; or

(iv) A significant deviation from performance specifications which will require extensive evaluation, extensive redesign, or extensive repair to establish the adequacy of a structure, system, or component to meet the criteria and bases stated in the safety analysis report or construction permit or to otherwise establish the adequacy of the structure, system, or component to perform its intended safety function.

(2) The holder of a construction permit shall within 24 hours notify the appropriate Nuclear Regulatory Commission Regional Office of each reportable deficiency.

(3)(i) The holder of a construction permit shall also submit, as specified in § 50.4, a written report on a reportable deficiency within 30 days.

(ii) The report must include a description of the deficiency, an analysis of the safety implications and the corrective action taken, and sufficient information to permit analysis and evaluation of the deficiency and of the corrective action. If sufficient information is not available for a definitive report to be submitted within 30 days, an interim report containing all available information shall be filed, as specified in § 50.4, together with a statement that indicates when a complete report will be filed.

(4) Remedial action may be taken both prior to and after notification of the Division of Inspection and Enforcement subject to the risk of subsequent disapproval of such action by the Commission.

(f)(1) Each nuclear power plant or fuel reprocessing plant construction permit holder subject to the quality assurance criteria in Appendix B of this part shall implement, pursuant to § 50.34(a)(7) of this part, the quality assurance program described or referenced in the Safety Analysis Report, including changes to that report.

(2) Each construction permit holder described in paragraph (f)(1) of this section shall, by June 10, 1983, submit to the appropriate NRC Regional Office shown in Appendix D of Part 20 of this chapter the current description of the quality assurance program it is implementing for inclusion in the Safety Analysis Report, unless there are no changes to the description previously accepted by NRC. This submittal must identify changes made to the quality assurance program description since the description was submitted to NRC. (Should a permit holder need additional time beyond June 10, 1983 to submit its current quality assurance program description to NRC, it shall notify the appropriate NRC Regional Office in writing, explain why additional time is needed, and provide a schedule for NRC approval showing when its current quality assurance program description will be submitted.)

(3) After March 11, 1983, each construction permit holder described in paragraph (f)(1) of this section may make a change to a previously accepted quality assurance program description included or referenced in the Safety Analysis Report, provided the change does not reduce the commitments in the program description previously accepted by the NRC. Changes to the quality assurance program description that do not reduce the commitments must be submitted to NRC within 90 days. Changes to the quality assurance program description that do reduce the commitments must be submitted to NRC and receive NRC approval before implementation, as follows:

(i) Changes to the Safety Analysis Report must be submitted for review as specified in § 50.4. Changes made to NRC-accepted quality assurance topical report descriptions must be submitted as specified in § 50.4.

(ii) The submittal of a change to the Safety Analysis Report quality assurance program description must include all pages affected by that change and must be accompanied by a forwarding letter identifying the change, the reason for the change, and the basis for concluding that the revised program incorporating the change continues to satisfy the criteria of Appendix B of this part and the Safety Analysis Report quality assurance program description commitments previously accepted by the NRC (the letter need not provide the basis for changes that correct spelling, punctuation, or editorial items).

(iii) A copy of the forwarding letter identifying the changes must be maintained as a facility record for three years.

(iv) Changes to the quality assurance program description included or referenced in the Safety Analysis Report shall be regarded as accepted by the Commission upon receipt of a letter to this effect from the appropriate reviewing office of the Commission or 60 days after submittal to the Commission, whichever occurs first.

[21 FR 355, Jan. 19, 1956, as amended at 32 FR 4055, Mar. 15, 1967; 35 FR 11461, July 17, 1970; 35 FR 19661, Dec. 29, 1970; 36 FR 11424, June 12, 1971; 37 FR 6460, Mar. 30, 1972; 38 FR 1272, Jan. 11, 1973; 41 FR 16446, Apr. 19, 1976; 42 FR 43385, Aug. 29, 1977; 48 FR 1029, Jan. 10, 1983; 51 FR 40309, Nov. 6, 1986]

§ 50.55a Codes and standards.

Each operating license for a boiling or pressurized water-cooled nuclear power facility shall be subject to the conditions in paragraph (g) of this section and each construction permit for a utilization facility shall be subject to the following conditions in addition to those specified in § 50.55.

(a)(1) Structures, systems, and components shall be designed, fabricated, erected, constructed, tested, and inspected to quality standards commensurate with the importance of the safety function to be performed.

(2) Systems and components of boiling and pressurized water-cooled nuclear power reactors must meet the requirements of the ASME Boiler and Pressure Vessel Code specified in paragraphs (b), (c), (d), (e), and (g) of this section. Protection systems of nuclear power reactors of all types must meet the requirements specified in paragraph (h) of this section.

(3) Proposed alternatives to the requirements of paragraphs (c), (d), (e), (g), and (h) of this section or portions thereof may be used when authorized by the Director of the Office of Nuclear Reactor Regulation. The applicant must demonstrate that (i) the proposed alternatives would provide an acceptable level of quality and safety, or (ii) compliance with the specified requirements of this section would result in hardship or unusual difficulties without a compensating increase in the level of quality and safety.

(b) The ASME Boiler and Pressure Vessel Code, which is referenced in the following paragraphs, was approved for incorporation by reference by the Director of the Federal Register on January 1, 1981. A notice of any changes made to the material incorporated by reference will be published in the Federal Register. Copies of the ASME Boiler and Pressure Vessel Code may be purchased from the American Society of Mechanical Engineers, United Engineering Center, 345 East 47th St., New York, NY 10017. It s also available for inspection at the Nuclear Regulatory Commission's Public Document Room, 2120 L Street, NW., Washington, D.C.

(1) As used in this section, references o Section III of the ASME Boiler and Pressure Vessel Code refer to Section II, Division 1, and include editions hrough the 1983 Edition and Addenda through the Winter 1985 Addenda, nd the 1986 Edition.

(2) As used in this section, references o Section XI of the ASME Boiler and Pressure Vessel Code refer to Section XI, Division 1, and include editions hrough the 1983 Edition and Addenda through the Winter 1985 Addenda, nd the 1986 Edition, subject to the following limitations and modifications:

(i) *Limitations on specific editions and addenda.* When applying the 1974 Edition, only the addenda through the Summer 1975 Addenda may be used. When applying the 1977 Edition, all of the addenda through the Summer 1978 Addenda must also be used. Addenda and editions subsequent to the Summer 1978 Addenda, that are incorporated by reference in paragraph (b)(2) of this section are not affected by these limitations.

(ii) *Pressure-retaining welds in ASME Code Class 1 piping (applies to Table IWB-2500 and IWB-2500-1 and Category B-J).* If the facility's application for a construction permit was docketed prior to July 1, 1978, the extent of examination for Code Class 1 pipe welds may be determined by the requirements of Table IWB-2500 and Table IWB-2600 Category B-J of Section XI of the ASME Code in the 1974 Edition and addenda through the Summer 1975 Addenda or other requirements the Commission may adopt.

(iii) *Steam generator tubing (modifies Article IWB-2000).* If the technical specifications of a nuclear power plant include surveillance requirements for steam generators different than those in Article IWB-2000, the inservice inspection program for steam generator tubing shall be governed by the requirements in the technical specifications.

(iv) Pressure-retaining welds in ASME Code Class 2 piping (applies to Tables IWC-2520 or IWC-2520-1, Category C-F). (A) Appropriate Code Class 2 pipe welds in Residual Heat Removal Systems, Emergency Core Cooling Systems and Containment Heat Removal Systems, shall be examined. When applying editions and addenda up to the 1983 Edition through the Summer 1983 Addenda of Section XI of the ASME Code, the extent of examination for these systems shall be determined by the requirements of paragraph IWC-1220, Table IWC-2520 Category C-F and C-G, and paragraph IWC-2411 in the 1974 Edition and Addenda through the Summer 1975 Addenda.

(B) For a nuclear power plant whose application for a construction permit was docketed prior to July 1, 1978, when applying editions and addenda up to the 1983 Edition through the Summer 1983 Addenda of Section XI of the ASME Code, the extent of examination for Code Class 2 pipe welds may be determined by the requirements of paragraph IWC-1220, Table IWC-2520 Category C-F and C-G and paragraph IWC-2411 in the 1974 Edition and Addenda through the Summer 1975 Addenda of Section XI of the ASME Code or other requirements the Commission may adopt.

(v) Evaluation procedures and acceptance criteria for austenitic piping (applies to IWB-3640). When applying the Winter 1983 Addenda and Winter 1984 Addenda, the rules of paragraph IWB-3640 may be used for all applications permitted in that paragraph, except those associated with submerged arc welds (SAW) or shielded metal arc welds (SMAW). For SAW or SMAW, use paragraph IWB-3640, as modified by the Winter 1985 Addenda.

(c) *Reactor coolant pressure boundary.* (1) Components which are part of the reactor coolant pressure boundary must meet the requirements for Class 1 components in Section III [4, 5] of the ASME Boiler and Pressure Vessel Code, except as provided in paragraphs (c)(2), (c)(3), and (c)(4) of this section.

(2) Components which are connected to the reactor coolant system and are part of the reactor coolant pressure boundary as defined in § 50.2 need not meet the requirements of paragraph (c)(1) of this section, *Provided:*

(i) In the event of postulated failure of the component during normal reactor operation, the reactor can be shut down and cooled down in an orderly manner, assuming makeup is provided by the reactor coolant makeup system; or

(ii) The component is or can be isolated from the reactor coolant system by two valves in series (both closed, both open, or one closed and the other open). Each open valve must be capable of automatic actuation and, assuming the other valve is open, its closure time must be such that, in the event of postulated failure of the component during normal reactor operation, each valve remains operable and the reactor can be shut down and cooled down in an orderly manner, assuming makeup is provided by the reactor coolant makeup system only.

(3) The Code Edition, Addenda, and optional Code Cases [6] to be applied to components of the reactor coolant pressure boundary must be determined by the provisions of paragraph NCA-1140, Subsection NCA of Section III of the ASME Boiler and Pressure Vessel Code, but (i) the edition and addenda applied to a component must be those which are incorporated by reference in paragraph (b)(1) of this section, (ii) the ASME Code provisions applied to the pressure vessel may be dated no earlier than the Summer 1972 Addenda of the 1971 edition, (iii) the ASME Code provisions applied to piping, pumps, and valves may be dated no earlier than the Winter 1972 Addenda of the 1971 edition, and (iv) ASME Code Cases [6] must have been determined suitable for use by the NRC.

(4) For a nuclear power plant whose construction permit was issued prior to May 14, 1984 the applicable Code Edition and Addenda for a component of the reactor coolant pressure boundary continue to be that Code Edition and Addenda that were required by Commission regulations for such component at the time of issuance of the construction permit.

(d) *Quality Group B components.* (1) For a nuclear power plant whose application for a construction permit is docketed after May 14, 1984 components classified Quality Group B [7] must meet the requirements for Class 2 Components in Section III of the ASME Boiler and Pressure Vessel Code.

(2) The Code Edition, Addenda, and optional Code Cases [6] to be applied to the systems and components identified in paragraph (d)(1) of this section must be determined by the rules of paragraph NCA-1140, Subsection NCA of Section III of the ASME Boiler Vessel and Pressure Code, but (i) the edition and addenda must be those which are incorporated by reference in

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See footnotes at end of section.

paragraph (b)(1) of this section, (ii) the ASME Code provisions applied to the systems and components may be dated no earlier than the 1980 Edition, and (iii) the ASME Code Cases [6] must have been determined suitable for use by the NRC.

(e) *Quality Group C components.* (1) For a nuclear power plant whose application for a construction permit is docketed after May 14, 1984 components classified Quality Group C [9] must meet the requirements for Class 3 components in Section III of the ASME Boiler and Pressure Vessel Code.

(2) The Code Edition, Addenda, and optional Code Cases [6] to be applied to the systems and components identified in paragraph (e)(1) of this section must be determined by the rules of paragraph NCA-1140, subsection NCA of Section III of the ASME Boiler and Pressure Vessel Code, but (i) the edition and addenda must be those which are incorporated by reference in paragraph (b)(1) of this section, (ii) the ASME Code provisions applied to the systems and components may be dated no earlier than the 1980 Edition, and (iii) the ASME Code Cases [6] must have been determined suitable for use by the NRC.

(f) [Reserved]

(g) *Inservice inspection requirements.* (1) For a boiling or pressurized water-cooled nuclear power facility whose construction permit was issued prior to January 1, 1971, components (including supports) shall meet the requirements of paragraphs (g) (4) and (5) of this section to the extent practical. Components which are part of the reactor coolant pressure boundary and their supports shall meet the requirements applicable to components which are classified as ASME Code Class 1. Other safety-related pressure vessels, piping, pumps and valves shall meet the requirements applicable to components which are classified as ASME Code Class 2 or Class 3.

(2) For a boiling or pressurized water-cooled nuclear power facility whose construction permit was issued on or after January 1, 1971, but before July 1, 1974, components (including supports) which are classified as ASME Code Class 1 and Class 2 shall be designed and be provided with access to enable the performance of (i) inservice examination of such components (including supports) and (ii) tests for operational readiness of pumps and valves, and shall meet the preservice examination requirements set forth in editions of Section XI of the ASME Boiler and Pressure Vessel Code and Addenda [6] in effect 6 months prior to the date of issuance of the construction permit. The components (including supports) may meet the requirements set forth in subsequent editions of this code and addenda which are incorporated by reference in paragraph (b) of this section, subject to the limitations and modifications listed therein.

(3) For a boiling or pressurized water-cooled nuclear power facility whose construction permit was issued on or after July 1, 1974:

(i) Components which are classified as ASME Code Class 1 shall be designed and be provided with access to enable the performance of inservice examination of such components and shall meet the preservice examination requirements set forth in Section XI of editions of the ASME Boiler and Pressure Vessel Code and Addenda [6] applied to the construction of the particular component.

(ii) Components which are classified as ASME Code Class 2 and Class 3 and supports for components which are classified as ASME Code Class 1, Class 2, and Class 3 shall be designed and be provided with access to enable the performance of inservice examination of such components and shall meet the preservice examination requirements set forth in Section XI of editions of the ASME Boiler and Pressure Vessel Code and Addenda [6] applied to the construction of the particular component.

(iii) Pumps and valves which are classified as ASME Code Class 1 shall be designed and be provided with access to enable the performance of inservice testing of the pumps and valves for assessing operational readiness set forth in Section XI of editions of the ASME Boiler and Pressure

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See footnotes at end of section.

Vessel Code and Addenda[6] applied to the construction of the particular pump or valve or the Summer 1973 Addenda, whichever is later.

(iv) Pumps and valves which are classified as ASME Code Class 2 and Class 3 shall be designed and be provided with access to enable the performance of inservice testing of the pumps and valves for assessing operational readiness set forth in Section XI of editions of the Boiler and Pressure Vessel Code and Addenda[6] applied to the construction of the particular pump or valve or the Summer 1973 Addenda, whichever is later.

(v) All components (including supports) may meet the requirements set forth in subsequent editions of codes and addenda or portions thereof which are incorporated by reference in paragraph (b) of this section, subject to the limitations and modifications listed therein.

(4) Throughout the service life of a boiling or pressurized water-cooled nuclear power facility, components (including supports) which are classified as ASME Code Class 1, Class 2 and Class 3 shall meet the requirements, except design and access provisions and preservice examination requirements, set forth in Section XI of editions of the ASME Boiler and Pressure Vessel Code and Addenda that become effective subsequent to editions specified in paragraphs (g)(2) and (g)(3) of this section and are incorporated by reference in paragraph (b) of this section, to the extent practical within the limitations of design, geometry and materials of construction of the components.

(i) Inservice examinations of components, inservice tests to verify operational readiness of pumps and valves whose function is required for safety, and system pressure tests, conducted during the initial 120-month inspection interval shall comply with the requirements in the latest edition and addenda of the Code incorporated by reference in paragraph (b) of this section on the date 12 months prior to the date of issuance of the operating license, subject to the limitations and modifications listed in paragraph (b) of this section.

(ii) Inservice examinations of components, inservice tests to verify operational readiness of pumps and valves whose function is required for safety, and system pressure tests, conducted during successive 120-month inspection intervals shall comply with the requirements of the latest edition and addenda of the Code incorporated by reference in paragraph (b) of this section 12 months prior to the start of the 120-month inspection interval, subject to the limitations and modifications listed in paragraph (b) of this section.

(iii) [Reserved]

(iv) Inservice examinations of components, tests of pumps and valves, and system pressure tests, may meet the requirements set forth in subsequent editions and addenda that are incorporated by reference in paragraph (b) of this section, subject to the limitations and modifications listed in paragraph (b) of this section, and subject to Commission approval. Portions of editions or addenda may be used provided that all related requirements of the respective editions or addenda are met.

(5)(i) The inservice inspection program for a boiling or pressurized water-cooled nuclear power facility shall be revised by the licensee, as necessary, to meet the requirements of paragraph (g)(4) of this section.

(ii) If a revised inservice inspection program for a facility conflicts with the technical specification for the facility, the licensee shall apply to the Commission for amendment of the technical specifications to conform the technical specification to the revised program. The licensee shall submit this application, as specified in § 50.4, at least six months before the start of the period during which the provisions become applicable, as determined by paragraph (g)(4) of this section.

(iii) If the licensee has determined that conformance with certain code requirements is impractical for its facility, the licensee shall notify the Commission and submit, as specified in § 50.4, information to support the determinations.

(iv) Where an examination or test requirement by the code or addenda is determined to be impractical by the licensee and is not included in the revised inservice inspection program as permitted by paragraph (g)(4) of this section, the basis for this determination shall be demonstrated to the satisfaction of the Commission not later than 12 months after the expiration of the initial 120-month period of operation from start of facility commercial operation and each subsequent 120-month period of operation during which the examination or test is determined to be impractical.

(6)(i) The Commission will evaluate determinations under paragraph (g)(5) of this section that code requirements are impractical. The Commission may grant such relief and may impose such alternative requirements as it determines is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest giving due consideration to the burden upon the licensee that could result if the requirements were imposed on the facility.

(ii) The Commission may require the licensee to follow an augmented inservice inspection program for systems and components for which the Commission deems that added assurance of structural reliability is necessary.

(h) *Protection systems.* For construction permits issued after January 1, 1971, protection systems shall meet the requirements set forth in editions or revisions of the Institute of Electrical and Electronics Engineers Standard: "Criteria for Protection Systems for Nuclear Power Generating Stations," (IEEE-279) in effect[7] on the formal docket date[8] of the application for a construction permit. Protection systems may meet the requirements set forth in subsequent editions or revisions of IEEE-279 which become effective.

Footnotes to § 50.55a:

[1-3] [Reserved]

[4] USAS and ASME Code addenda issued prior to the Winter 1977 Addenda are considered to be "in effect" or "effective" 6 months after their date of issuance *and* after they are incorporated by reference in paragraph (b) of this section. Addenda to the ASME Code issued after the Summer 1977 Addenda are considered to be "in effect" or "effective" after the date of publication of the addenda *and* after they are incorporated by reference in paragraph (b) of this section.

[5] For ASME Code Editions and Addenda issued prior to the Winter 1977 Addenda, the Code Edition and Addenda applicable to the component is governed by the order or contract date for the component, not the contract date for the nuclear energy system. For the Winter 1977 addenda and subsequent editions and addenda the method for determining the applicable Code editions and addenda is contained in Paragraph NCA 1140 of Section III of the ASME Code.

[6] ASME Code cases that have been determined suitable for use by the Commission staff are listed in NRC Regulatory Guide 1.84, "Design and Code Case Acceptability—ASME Section III Division 1," NRC Regulatory Guide 1.85, "Materials Code Case Acceptability—ASME Section III Division 1," and NRC Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability—ASME Section XI Division 1." The use of other Code cases may be authorized by the Director of the Office of Nuclear Reactor Regulation upon request pursuant to § 50.55a(a)(3).

[7] For purposes of this regulation the proposed IEEE 279 became "in effect" on August 30, 1968, and the revised issue IEEE 279-1971 became "in effect" on June 3, 1971. Copies may be obtained from the Institute of Electrical and Electronics Engineers, United Engineering Center, 345 East 47th St., New York, NY 10017. Copies are available for inspection at the Commission's Technical Library, Phillips Building, 7920 Norfolk Avenue, Bethesda, Maryland.

[8] Where an application for a construction permit is submitted in four parts pursuant to the provisions of § 2.101(a-1) and Subpart F of Part 2 of this chapter, "the formal docket date of the application for a construction permit" for purposes of this section shall be the date of docketing of the information required by § 2.101(a-1) (2) or (3), whichever is later.

[9] Guidance for quality group classifications of components which are to be included in the safety analysis reports pursuant to § 50.34(a) and § 50.34(b) may be found in Regulatory Guide 1.26, "Quality Group Classifications and Standards for Water-, Steam-, and Radiological-Waste-Containing Components of Nuclear Power Plants," and in Section 3.2.2 of NUREG-0800, "Standard Review Plan for Review of Safety Analysis Reports for Nuclear Power Plants."

[36 FR 11424, June 12, 1971]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 50.55a, see the List of CFR Sections Affected in the Finding Aids section of this volume.

§ 50.56 Conversion of construction permit to license; or amendment of license.

Upon completion of the construction or alteration of a facility, in compliance with the terms and conditions of the construction permit and subject to any necessary testing of the facility for health or safety purposes, the Commission will, in the absence of good cause shown to the contrary issue a license of the class for which the construction permit was issued or an appropriate amendment of the license, as the case may be.

[21 FR 355, Jan. 19, 1956, as amended at 35 FR 11461, July 17, 1970]

§ 50.57 Issuance of operating license.[1]

(a) Pursuant to § 50.56, an operating license may be issued by the Commission, up to the full term authorized by § 50.51, upon finding that:

(1) Construction of the facility has been substantially completed, in conformity with the construction permit and the application as amended, the provisions of the Act, and the rules and regulations of the Commission; and

(2) The facility will operate in conformity with the application as amended, the provisions of the Act, and the rules and regulations of the Commission; and

(3) There is reasonable assurance (i) that the activities authorized by the operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the regulations in this chapter; and

(4) The applicant is technically and financially qualified to engage in the activities authorized by the operating license in accordance with the regulations in this chapter. However, no finding of financial qualification is necessary for an electric utility applicant for an operating license for a utilization facility of the type described in § 50.21(b) or § 50.22.

(5) The applicable provisions of Part 140 of this chapter have been satisfied; and

(6) The issuance of the license will not be inimical to the common defense and security or to the health and safety of the public.

(b) Each operating license will include appropriate provisions with respect to any uncompleted items of construction and such limitations or conditions as are required to assure that operation during the period of the completion of such items will not endanger public health and safety.

(c) An applicant may, in a case where a hearing is held in connection with a pending proceeding under this section make a motion in writing, pursuant to this paragraph (c), for an operating license authorizing low-power testing (operation at not more than 1 percent of full power for the purpose of testing the facility), and further operations short of full power operation. Action on such a motion by the presiding officer shall be taken with due regard to the rights of the parties to the proceeding, including the right of any party to be heard to the extent that his contentions are relevant to the activity to be authorized. Prior to taking any action on such a motion which any party opposes, the presiding officer shall make findings on the matters specified in paragraph (a) of this section as to which there is a controversy, in the form of an initial decision with respect to the contested activity sought to be authorized. The Director of Nuclear Reactor Regulation will make findings on all other matters specified in paragraph (a) of this section. If no party opposes the motion, the presiding officer will issue an order pursuant to § 2.730(e) of this chapter, authorizing the Director of Nuclear Reactor Regulation to make appropriate findings on the matters specified in paragraph (a) of this section and to issue a license for the requested operation.

[35 FR 5318, Mar. 31, 1970, as amended at 35 FR 6644, Apr. 25, 1970; 37 FR 11873, June 15, 1972; 37 FR 15142, July 28, 1972; 49 FR 35753, Sept. 12, 1984; 51 FR 7765, Mar. 6, 1986]

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[1] The Commission may issue a provisional operating license pursuant to the regulations in this part in effect on March 30, 1970, for any facility for which a notice of hearing on an application for a provisional operating license or a notice of proposed issuance of a provisional operating license has been published on or before that date.

§ 50.58 Hearings and report of the Advisory Committee on Reactor Safeguards.

(a) Each application for a construction permit or an operating license for a facility which is of a type described in § 50.21(b) or § 50.22, or for a testing facility, shall be referred to the Advisory Committee on Reactor Safeguards for a review and report. An application for an amendment to such a construction permit or operating license may be referred to the Advisory Committee on Reactor Safeguards for review and report. Any report shall be made part of the record of the application and available to the public, except to the extent that security classification prevents disclosure.

(b)(1) The Commission will hold a hearing after at least 30-days' notice and publication once in the FEDERAL REGISTER on each application for a construction permit for a production or utilization facility which is of a type described in § 50.21(b) or § 50.22, or for a testing facility.

(2) When a construction permit has been issued for such a facility following the holding of a public hearing, and an application is made for an operating license or for an amendment to a construction permit or operating license, the Commission may hold a hearing after at least 30-days' notice and publication once in the FEDERAL REGISTER, or, in the absence of a request therefor by any person whose interest may be affected, may issue an operating license or an amendment to a construction permit or operating license without a hearing, upon 30-days' notice and publication once in the FEDERAL REGISTER of its intent to do so.

(3) If the Commission finds, in an emergency situation, as defined in § 50.91, that no significant hazards consideration is presented by an application for an amendment to an operating license, it may dispense with public notice and comment and may issue the amendment. If the Commission finds that exigent circumstances exist, as described in § 50.91, it may reduce the period provided for public notice and comment.

(4) Both in an emergency situation and in the case of exigent circumstances, the Commission will provide 30 days notice of opportunity for a hearing, though this notice may be published after issuance of the amendment if the Commission determines that no significant hazards consideration is involved.

(5) The Commission will use the standards in § 50.92 to determine whether a significant hazards consideration is presented by an amendment to an operating license for a facility of the type described in § 50.21(b) or § 50.22, or which is a testing facility, and may make the amendment immediately effective, notwithstanding the pendency before it of a request for a hearing from any person, in advance of the holding and completion of any required hearing, where it has determined that no significant hazards consideration is involved.

(6) No petition or other request for review of or hearing on the staff's significant hazards consideration determination will be entertained by the Commission. The staff's determination is final, subject only to the Commission's discretion, on its own initiative, to review the determination.

[27 FR 12186, Dec. 8, 1962, as amended at 35 FR 11461, July 17, 1970; 39 FR 10555, Mar. 21, 1974; 51 FR 7765, Mar. 6, 1986]

§ 50.59 Changes, tests and experiments.

(a)(1) The holder of a license authorizing operation of a production or utilization facility may (i) make changes in the facility as described in the safety analysis report, (ii) make changes in the procedures as described in the safety analysis report, and (iii) conduct tests or experiments not described in the safety analysis report, without prior Commission approval, unless the proposed change, test or experiment involves a change in the technical specifications incorporated in the license or an unreviewed safety question.

(2) A proposed change, test, or experiment shall be deemed to involve an unreviewed safety question (i) if the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report may be increased; or (ii) if a possibility for an accident or malfunction of a different

type than any evaluated previously in the safety analysis report may be created; or (iii) if the margin of safety as defined in the basis for any technical specification is reduced.

(b)(1) The licensee shall maintain records of changes in the facility and of changes in procedures made pursuant to this section, to the extent that these changes constitute changes in the facility as described in the safety analysis report or to the extent that they constitute changes in procedures as described in the safety analysis report. The licensee shall also maintain records of tests and experiments carried out pursuant to paragraph (a) of this section. These records must include a written safety evaluation which provides the bases for the determination that the change, test, or experiment does not involve an unreviewed safety question.

(2) The licensee shall submit, as specified in § 50.4, a report containing a brief description of any changes, tests, and experiments, including a summary of the safety evaluation of each. The report must be submitted annually or at such shorter intervals as may be specified in the license.

(3) The records of changes in the facility shall be maintained until the date of termination of the license, and records of changes in procedures and records of tests and experiments shall be maintained for a period of five years.

(c) The holder of a license authorizing operation of a production or utilization facility who desires (1) a change in technical specifications or (2) to make a change in the facility or the procedures described in the safety analysis report or to conduct tests or experiments not described in the safety analysis report, which involve an unreviewed safety question or a change in technical specifications, shall submit an application for amendment of his license pursuant to § 50.90.

[39 FR 10555, Mar. 21, 1974, as amended at 41 FR 16446, Apr. 19, 1976; 41 FR 18302, May 3, 1976; 42 FR 20139, Apr. 18, 1977; 51 FR 40309, Nov. 6, 1986]

§ 50.60 Acceptance criteria for fracture prevention measures for lightwater nuclear power reactors for normal operation.

(a) Except as provided in paragraph (b) of this section, all lightwater nuclear power reactors must meet the fracture toughness and material surveillance program requirements for the reactor coolant pressure boundary set forth in Appendices G and H to this part.

(b) Proposed alternatives to the described requirements in Appendices G and H of this part or portions thereof may be used when an exemption is granted by the Commission under § 50.12.

[48 FR 24009, May 27, 1983, as amended at 50 FR 50777, Dec. 12, 1985]

§ 50.61 Fracture toughness requirements for protection against pressurized thermal shock events.

(a) *Definitions.* For the purposes of this section:

(1) "ASME Code" means the American Society of Mechanical Engineers, Boiler and Pressure Vessel Code, Section III, "Rules for the Construction of Nuclear Power Plant Components," edition and addenda as specified by § 50.55a, Codes and Standards.

(2) "Pressurized Thermal Shock Event" means an event or transient in pressurized water reactors (PWRs) causing severe overcooling (thermal shock) concurrent with or followed by significant pressure in the reactor vessel.

(3) "Reactor Vessel Beltline" means the region of the reactor vessel (shell material including welds, heat affected zones, and plates or forgings) that directly surrounds the effective height of the active core and adjacent regions of the reactor vessel that are predicted to experience sufficient neutron radiation damage to be considered in the selection of the most limiting material with regard to radiation damage.

(4) "Initial RT_{NDT}" means the reference temperature for a reactor vessel material as defined in the ASME Code, Paragraph NB-2331. RT_{NDT} means the reference temperature as adjusted for the effects of neutron ra-

diation for the period of service in question.

(5) "RT_{PTS}" means the reference temperature calculated by the method given in paragraph (b)(2) of this section for use as a screening criterion.

(b) *Requirements.* (1) For each pressurized water nuclear power reactor for which an operating license has been issued, the licensee shall submit projected values of RT_{PTS} (at the inner vessel surface) of reactor vessel beltline materials by giving values from the time of submittal to the expiration date of the operating license. The assessment must specify the bases for the projection, including the assumptions regarding core loading patterns. This assessment must be submitted by January 23, 1986, and must be updated whenever changes in core loadings, surveillance measurements, or other information indicate a significant change in projected values.

(2) The pressurized thermal shock (PTS) screening criterion is 270 °F for plates, forgings, and axial weld materials, or 300 °F for circumferential weld materials. For the purpose of comparison with this criterion, the value of RT_{PTS} for the reactor vessel must be calculated as follows. The calculation must be made for each weld and plate, or forging, in the reactor vessel beltline. For each material, RT_{PTS} is the lower of the results given by Equations 1 and 2.

Equation 1:

$$RT_{PTS} = I + M + [-10 + 470 Cu + 350 Cu Ni] f^{0.270}$$

Equation 2:

$$RT_{PTS} = I + M + 283 f^{0.194}$$

(i) "I" means the initial reference temperature of the unirradiated material measured as defined in the ASME Code, Paragraph NB-2331. If a measured value is not available, the following generic mean values must be used: 0 °F for welds made with Linde 80 flux, and −56 °F for welds made with Linde 0091, 1092 and 124 and ARCOS B-5 weld fluxes.

(ii) "M" means the margin to be added to cover uncertainties in the values of initial RT_{NDT}, copper and nickel content, fluence and the calculational procedures. In Equation 1, M=48 °F if a measured value of I was used, and M=59 °F if the generic mean value of I was used. In Equation 2, M=0 °F if a measured value of I was used, and M=34 °F if the generic mean value of I was used.

(iii) "Cu" and "Ni" mean the best estimate weight percent of copper and nickel in the material. The source of these values must be included in the assessment. The relationship of the material, on which any measurements were made, to the actual material in the pressure vessel must be described.

(iv) "f" means the best estimate neutron fluence, in unit of 10^{19} n/cm^2 (E greater than or equal to 1 MeV), at the clad-base-metal interface on the inside surface of the vessel at the location where the material in question receives the highest fluence for the period of service in question.

(3) For each pressurized water nuclear power reactor for which the value of RT_{PTS} for any material in the beltline is projected to exceed the PTS screening criterion before the expiration date of the operating license, the licensee shall submit by April 23, 1986, an analysis and schedule for implementation of such flux reduction programs as are reasonably practicable to avoid exceeding the PTS screening criterion set forth in paragraph (b)(2). The schedule for implementation of flux reduction measures may take into account the schedule for submittal and anticipated Commission approval of detailed plant-specific analyses, submitted to demonstrate acceptable risk at values of RT_{PTS} above the screening limit due to plant modifications, new information or new analysis techniques.

(4) For each pressurized water nuclear power reactor for which the analysis required by paragraph (b)(3) of this section indicates that no reasonably practicable flux reduction program will prevent the value of RT_{PTS} from exceeding the PTS screening criterion before the expiration date of the operating license, the licensee shall submit a safety analysis to determine what, if any, modifications to equipment, systems, and operation are necessary to prevent potential failure of the reactor vessel as a result of postulated PTS events if continued operation

beyond the screening criterion is allowed. In the analysis, the licensee may determine reactor vessel materials properties based on available information, research results, and plant surveillance data, and may use probabilistic fracture mechanics techniques. This analysis must be submitted at least 3 years before the value of RT_{PTS} as defined in paragraph (b)(2) of this section is projected to exceed the PTS screening criterion or by one year after issuance of the Commission Guidance and Acceptance Criteria for these analyses, whichever is later.

(5) After consideration of the licensee's analyses (including effects of proposed corrective actions, if any) submitted in accordance with paragraphs (b)(3) and (b)(4) of this section, the Commission may, on a case-by-case basis, approve operation of the facility at values of RT_{PTS} in excess of the PTS screening criterion. The Commission will consider factors significantly affecting the potential for failure of the reactor vessel in reaching a decision.

(6) If the Commission concludes, pursuant to paragraph (b)(5) of this section, that operation of the facility at value of RT_{PTS} in excess of the PTS screening criterion cannot be approved on the basis of the licensee's analyses submitted in accordance with paragraphs (b)(3) and (b)(4) of this section, the licensee must request and receive Commission approval prior to any operation beyond the criterion. The request must be based upon modifications to equipment, systems, and operation of the facility in addition to those previously proposed in the submitted analyses that would reduce the potential for failure of the reactor vessel due to PTS events, or upon further analyses based upon new information or improved methodology.

[50 FR 29944, July 23, 1985]

§ 50.62 Requirements for reduction of risk from anticipated transients without scram (ATWS) events for light-water-cooled nuclear power plants.

(a) *Applicability.* The requirements of this section apply to all commercial light-water-cooled nuclear power plants.

(b) *Definition.* For purposes of this section, "Anticipated Transient Without Scram" (ATWS) means an anticipated operational occurrence as defined in Appendix A of this part followed by the failure of the reactor trip portion of the protection system specified in General Design Criterion 20 of Appendix A of this part.

(c) *Requirements.* (1) Each pressurized water reactor must have equipment from sensor output to final actuation device, that is diverse from the reactor trip system, to automatically initiate the auxiliary (or emergency) feedwater system and initiate a turbine trip under conditions indicative of an ATWS. This equipment must be designed to perform its function in a reliable manner and be independent (from sensor output to the final actuation device) from the existing reactor trip system.

(2) Each pressurized water reactor manufactured by Combustion Engineering or by Babcock and Wilcox must have a diverse scram system from the sensor output to interruption of power to the control rods. This scram system must be designed to perform its function in a reliable manner and be independent from the existing reactor trip system (from sensor output to interruption of power to the control rods).

(3) Each boiling water reactor must have an alternate rod injection (ARI) system that is diverse (from the reactor trip system) from sensor output to the final actuation device. The ARI system must have redundant scram air header exhaust valves. The ARI must be designed to perform its function in a reliable manner and be independent (from the existing reactor trip system) from sensor output to the final actuation device.

(4) Each boiling water reactor must have a standby liquid control system (SLCS) with the capability of injecting into the reactor pressure vessel a borated water solution at such a flow rate, level of boron concentration and boron-10 isotope enrichment, and accounting for reactor pressure vessel volume, that the resulting reactivity control is at least equivalent to that resulting from injection of 86 gallons per minute of 13 weight percent sodium pentaborate decahydrate solution at the natural boron-10 isotope

abundance into a 251-inch inside diameter reactor pressure vessel for a given core design. The SLCS and its injection location must be designed to perform its function in a reliable manner. The SLCS initiation must be automatc and must be designed to perform its unction in a reliable manner for plants granted a construction permit after July 26, 1984, and for plants granted a construction permit prior to July 26, 1984, that have already been designed and built to include this feaure.

(5) Each boiling water reactor must have equipment to trip the reactor oolant recirculating pumps automatially under conditions indicative of an ATWS. This equipment must be deigned to perform its function in a reliable manner.

(6) Information sufficient to demontrate to the Commission the adequay of items in paragraphs (c)(1) hrough (c)(5) of this section shall be ubmitted to the Commission as speciied in § 50.4.

(d) *Implementation.* By 180 days fter the issuance of the QA guidance or non-safety related components, ach licensee shall develop and submit o the Commission, as specified in 50.4, a proposed schedule for meetng the requirements of paragraphs c)(1) through (c)(5) of this section. Each shall include an explanation of he schedule along with a justification the schedule calls for final implementation later than the second refuling outage after July 26, 1984, or the ate of issuance of a license authorizng operation above 5 percent of full ower. A final schedule shall then be nutually agreed upon by the Commision and licensee.

49 FR 26044, June 26, 1984; 49 FR 27736, July 6, 1984, as amended at 51 FR 40310, Nov. 6, 1986; 54 FR 13362, Apr. 3, 1989]

50.63 Loss of all alternating current power.

(a) *Requirements.* (1) Each lightwater-cooled nuclear power plant liensed to operate must be able to withstand for a specified duration and ecover from a station blackout as deined in § 50.2. The specified station blackout duration shall be based on he following factors:

(i) The redundancy of the onsite emergency ac power sources;

(ii) The reliability of the onsite emergency ac power sources;

(iii) The expected frequency of loss of offsite power; and

(iv) The probable time needed to restore offsite power.

(2) The reactor core and associated coolant, control, and protection systems, including station batteries and any other necessary support systems, must provide sufficient capacity and capability to ensure that the core is cooled and appropriate containment integrity is maintained in the event of a station blackout for the specified duration. The capability for coping with a station blackout of specified duration shall be determined by an appropriate coping analysis. Utilities are expected to have the baseline assumptions, analyses, and related information used in their coping evaluations available for NRC review.

(b) *Limitation of scope.* Paragraph (c) of this section does not apply to those plants licensed to operate prior to *July 21, 1988,* if the capability to withstand station blackout was specifically addressed in the operating license proceeding and was explicitly approved by the NRC.

(c) *Implementation.*—(1) *Information Submittal.* For each light-water-cooled nuclear power plant licensed to operate on or before *July 21, 1988,* the licensee shall submit the information defined below to the Director of the Office of Nuclear Reactor Regulation by *April 17, 1989.* For each light-water-cooled nuclear power plant licensed to operate after the effective date of this amendment, the licensee shall submit the information defined below to the Director by 270 days after the date of license issuance.

(i) A proposed station blackout duration to be used in determining compliance with paragraph (a) of this section, including a justification for the selection based on the four factors identified in paragraph (a) of this section;

(ii) A description of the procedures that will be implemented for station blackout events for the duration determined in paragraph (c)(1)(i) of this section and for recovery therefrom; and

(iii) A list of modifications to equipment and associated procedures, if any, necessary to meet the requirements of paragraph (a) of this section, for the specified station blackout duration determined in paragraph (c)(1)(i) of this section, and a proposed schedule for implementing the stated modifications.

(2) *Alternate ac source:* The alternate ac power source(s), as defined in § 50.2, will constitute acceptable capability to withstand station blackout provided an analysis is performed which demonstrates that the plant has this capability from onset of the station blackout until the alternate ac source(s) and required shutdown equipment are started and lined up to operate. The time required for startup and alignment of the alternate ac power source(s) and this equipment shall be demonstrated by test. Alternate ac source(s) serving a multiple unit site where onsite emergency ac sources are not shared between units must have, as a minimum, the capacity and capability for coping with a station blackout in any of the units. At sites where onsite emergency ac sources are shared between units, the alternate ac source(s) must have the capacity and capability as required to ensure that all units can be brought to and maintained in safe shutdown (non-DBA) as defined in § 50.2. If the alternate ac source(s) meets the above requirements and can be demonstrated by test to be available to power the shutdown buses within 10 minutes of the onset of station blackout, then no coping analysis is required.

(3) *Regulatory Assessment:* After consideration of the information submitted in accordance with paragraph (c)(1) of this section, the Director, Office of Nuclear Reactor Regulation, will notify the licensee of the Director's conclusions regarding the adequacy of the proposed specified station blackout duration, the proposed equipment modifications and procedures, and the proposed schedule for implementing the procedures and modifications for compliance with paragraph (a) this section.

(4) *Implementation Schedule:* For each light-water-cooled nuclear power plant licensed to operate on or before June 21, 1988, the licensee shall, within 30 days of the notification provided in accordance with paragraph (c)(3) of this section, submit to the Director of the Office of Nuclear Reactor Regulation a schedule commitment for implementing any equipment and associated procedure modifications necessary to meet the requirements of paragraph (a) of this section. This submittal must include an explanation of the schedule and a justification if the schedule does not provide for completion of the modifications within two years of the notification provided in accordance with paragraph (c)(3) of this section. A final schedule for implementing modifications necessary to comply with the requirements of paragraph (a) of this section will be established by the NRC staff in consultation and coordination with the affected licensee.

[53 FR 23215, June 21, 1988]

§ 50.64 Limitations on the use of highly enriched uranium (HEU) in domestic non-power reactors.

(a) *Applicability.* The requirements of this section apply to all non-power reactors.

(b) *Requirements.* (1) The Commission will not issue a construction permit after March 27, 1986 for a non-power reactor where the applicant proposes to use highly enriched uranium (HEU) fuel, unless the applicant demonstrates that the proposed reactor will have a unique purpose as defined in § 50.2.

(2) Unless the Commission has determined, based on a request submitted in accordance with paragraph (c)(1) of this section, that the non-power reactor has a unique purpose, each licensee authorized to possess and use HEU fuel in connection with the reactor's operation shall:

(i) Not initiate acquisition of additional HEU fuel, if low enriched uranium (LEU) fuel acceptable to the Commission for that reactor is available when it proposes that acquisition; and

(ii) Replace all HEU fuel in its possession with available LEU fuel acceptable to the Commission for that reactor, in accordance with a schedule determined pursuant to paragraph (c)(2) of this section.

(3) If not required by paragraphs (b)(1) and (2) of this section to use LEU fuel, the applicant or licensee must use HEU fuel of enrichment as close to 20% as is available and acceptable to the Commisson.

(c) *Implementation.* (1) Any request by a licensee for a determination that a non-power reactor has a unique purpose as defined in § 50.2 should be submitted with supporting documentation to the Director of the Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555, by September 29, 1986.

(2) (i) By March 27, 1987 and at 12-month intervals thereafter, each licensee of a non-power reactor authorzed to possess and use HEU fuel shall develop and submit to the Director of the Office of Nuclear Reactor Regulation a written proposal for meeting the requirements of paragraph (b) (2) or (3) of this section. The licensee shall include in the proposal a certification that Federal Government fundng for conversion is available through the Department of Energy (DOE) or other appropriate Federal Agency. The licensee shall also include in the proposal a schedule for conversion, based upon availability of replacement fuel acceptable to the Commisson for that reactor and upon consideration of other factors such as the availability of shipping casks, implementation of arrangements for the available financial support, and reactor usage.

(ii) If Federal Government funding for conversion cannot be certified, the proposal's contents may be limited to a statement of this fact. If a statement of non-availability of Federal Government funding for conversion is submited by a licensee, then it shall be required to resubmit a proposal for meeting the requirements of paragraph (b) (2) or (3) of this section at 12-month intervals.

(iii) The proposal shall include, to the extent required to effect the conversion, all necessary changes in the license, facility, or procedures. Supportng safety analyses should be provided so as to meet the schedule established for conversion. As long as Federal Government funding for conversion is not available, the resubmittal may be a reiteration of the original proposal. The Director of the Office of Nuclear Reactor Regulation shall review the proposal and confirm the status of Federal Government funding for conversion and, if a schedule for conversion has been submitted by the licensee, will then determine a final schedule.

(3) After review of the safety analysis required by paragraph (c)(2), the Director of the Office of Nuclear Reactor Regulation will issue an appropriate enforcement order directing both the conversion and, to the extent consistent with protection of the public health and safety, any necessary changes to the license, facility, or procedures.

[51 FR 6519, Feb. 25, 1986]

INSPECTIONS, RECORDS, REPORTS, NOTIFICATIONS

§ 50.70 Inspections.

(a) Each licensee and each holder of a construction permit shall permit inspection, by duly authorized representatives of the Commission, of his records, premises, activities, and of licensed materials in possession or use, related to the license or construction permit as may be necessary to effectuate the purposes of the Act, including section 105 of the Act.

(b)(1) Each licensee and each holder of a construction permit shall upon request by the Director, Office of Nuclear Reactor Regulation, provide rent-free office space for the exclusive use of the Commission inspection personnel. Heat, air conditioning, light, electrical outlets and janitorial services shall be furnished by each licensee and each holder of a construction permit. The office shall be convenient to and have full access to the facility and shall provide the inspector both visual and acoustic privacy.

(2) For a site with a single power reactor or fuel facility licensed pursuant to Part 50, the space provided shall be adequate to accommodate a full-time inspector, a part-time secretary and transient NRC personnel and will be

generally commensurate with other office facilities at the site. A space of 250 square feet either within the site's office complex or in an office trailer or other on site space is suggested as a guide. For sites containing multiple power reactor units or fuel facilities, additional space may be requested to accommodate additional full-time inspector(s). The office space that is provided shall be subject to the approval of the Director, Office of Nuclear Reactor Regulation. All furniture, supplies and communication equipment will be furnished by the Commission.

(3) The licensee or construction permit holder shall afford any NRC resident inspector assigned to that site, or other NRC inspectors identified by the Regional Administrator as likely to inspect the facility, immediate unfettered access, equivalent to access provided regular plant employees, following proper identification and compliance with applicable access control meaures for security, radiological protection and personal safety.

(4) The licensee or construction permit holder (nuclear power reactor only) shall ensure that the arrival and presence of an NRC inspector, who has been properly authorized facility access as described in paragraph (b)(3) of this section, is not announced or otherwise communicated by its employees or contractors to other persons at the facility unless specifically requested by the NRC inspector.

[21 FR 355, Jan. 19, 1956; 44 FR 47919, Aug. 16, 1979, as amended at 52 FR 31612, Aug. 21, 1987; 53 FR 42942, Oct. 25, 1988]

§ 50.71 Maintenance of records, making of reports.

(a) Each licensee and each holder of a construction permit shall maintain all records and make all reports, in connection with the activity, as may be required by the conditions of the license or permit or by the rules, regulations, and orders of the Commission in effectuating the purposes of the Act, including section 105 of the Act. Reports must be submitted in accordance with § 50.4.

(b) With respect to any production or utilization facility of a type described in § 50.21(b) or 50.22, or a testing facility, each licensee and each holder of a construction permit shall submit its annual financial report, including the certified financial statements, to the Commission, as specified in § 50.4, upon issuance of the report.

(c) Records that are required by the regulations in this part, by license condition, or by technical specifications, must be retained for the period specified by the appropriate regulation, license condition, or technical specification. If a retention period is not otherwise specified, these records must be retained until the Commission terminates the facility license.

(d)(1) Records which must be maintained pursuant to this part may be the original or a reproduced copy or microform if such reproduced copy or microform is duly authenticated by authorized personnel and the microform is capable of producing a clear and legible copy after storage for the period specified by Commission regulations. The record may also be stored in electronic media with the capability of producing legible, accurate, and complete records during the required retention period. Records such as letters, drawings, specifications, must include all pertinent information such as stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.

(2) If there is a conflict between the Commission's regulations in this part, license condition, or technical specification, or other written Commission approval or authorization pertaining to the retention period for the same type of record, the retention period specified in the regulations in this part for such records shall apply unless the Commission, pursuant to § 50.12 of this part, has granted a specific exemption from the record retention requirements specified in the regulations in this part.

(e) Each person licensed to operate a nuclear power reactor pursuant to the provisions of § 50.21 or § 50.22 of this part shall update periodically, as provided in paragraphs (e)(3) and (4) of this section, the final safety analysis report (FSAR) originally submitted as part of the application for the operating license, to assure that the information included in the FSAR contains the latest material developed. This submittal shall contain all the changes necessary to reflect information and analyses submitted to the Commission by the licensee or prepared by the licensee pursuant to Commission requirement since the submission of the original FSAR or, as appropriate, the last updated FSAR. The updated FSAR shall be revised to include the effects of: all changes made in the facility or procedures as described in the FSAR; all safety evaluations performed by the licensee either in support of requested license amendments or in support of conclusions that changes did not involve an unreviewed safety question; and all analyses of new safety issues performed by or on behalf of the licensee at Commission request. The updated information shall be appropriately located within the FSAR.

(1) The licensee shall submit revisions containing updated information to the Commission, as specified in § 50.4, on a replacement-page basis that is accompanied by a list which identifies the current pages of the FSAR following page replacement.

(2) The submittal shall include (i) a certification by a duly authorized officer of the licensee that either the information accurately presents changes made since the previous submittal, necessary to reflect information and analyses submitted to the Commission or prepared pursuant to Commission requirement, or that no such changes were made; and (ii) an identification of changes made under the provisions of § 50.59 but not previously submitted to the Commission.

(3)(i) A revision of the original FSAR containing those original pages that are still applicable plus new replacement pages shall be filed within 24 months of either July 22, 1980, or the date of issuance of the operating license, whichever is later, and shall bring the FSAR up to date as of a maximum of 6 months prior to the date of filing the revision.

(ii) Not less than 15 days before § 50.71(e) becomes effective, the Director of the Office of Nuclear Reactor Regulation shall notify by letter the licensees of those nuclear power plants initially subject to the NRC's systematic evaluation program that they need not comply with the provisions of this section while the program is being conducted at their plant. The Director of the Office of Nuclear Reactor Regulation will notify by letter the licensee of each nuclear power plant being evaluated when the systematic evaluation program has been completed. Within 24 months after receipt of this notification, the licensee shall file a complete FSAR which is up to date as of a maximum of 6 months prior to the date of filing the revision.

(4) Subsequent revisions shall be filed no less frequently than annually and shall reflect all changes up to a maximum of 6 months prior to the date of filing.

(5) Each replacement page shall include both a change indicator for the area changed, e.g., a bold line vertically drawn in the margin adjacent to the portion actually changed, and a page change identification (date of change or change number or both).

(6) The updated FSAR shall be retained by the licensee until the Commission terminates their license.

[33 FR 9704, July 4, 1968, as amended at 41 FR 18303, May 3, 1976; 45 FR 30615, May 9, 1980; 51 FR 40310, Nov. 6, 1986; 53 FR 19250, May 27, 1988]

§ 50.72 Immediate notification requirements for operating nuclear power reactors.

(a) *General requirements.*[1] (1) Each nuclear power reactor licensee licensed under § 50.21(b) or § 50.22 of this part shall notify the NRC Operations Center via the Emergency Notification System of:

(i) The declaration of any of the Emergency Classes specified in the licensee's approved Emergency Plan;[2] or

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[1] Other requirements for immediate notification of the NRC by licensed operating nuclear power reactors are contained elsewhere in this chapter, in particular, §§ 20.205, 20.403, 50.36, and 73.71.

[2] These Emergency Classes are addressed in Appendix E of this part.

(ii) Of those non-Emergency events specified in paragraph (b) of this section.

(2) If the Emergency Notification System is inoperative, the licensee shall make the required notifications via commercial telephone service, other dedicated telephone system, or any other method which will ensure that a report is made as soon as practical to the NRC Operations Center.[3]

(3) The licensee shall notify the NRC immediately after notification of the appropriate State or local agencies and not later than one hour after the time the licensee declares one of the Emergency Classes.

(4) When making a report under paragraph (a)(3) of this section, the licensee shall identify:

(i) The Emergency Class declared; or

(ii) Either paragraph (b)(1), "One-Hour Report," or paragraph (b)(2), "Four-Hour Report," as the paragraph of this section requiring notification of the Non-Emergency Event.

(b) *Non-emergency events*—(1) *One-hour reports.* If not reported as a declaration of an Emergency Class under paragraph (a) of this section, the licensee shall notify the NRC as soon as practical and in all cases within one hour of the occurrence of any of the following:

(i)(A) The initiation of any nuclear plant shutdown required by the plant's Technical Specifications.

(B) Any deviation from the plant's Technical Specifications authorized pursuant to § 50.54(x) of this part.

(ii) Any event or condition during operation that results in the condition of the nuclear powerplant, including its principal safety barriers, being seriously degraded; or results in the nuclear power plant being:

(A) In an unanalyzed condition that significantly compromises plant safety;

(B) In a condition that is outside the design basis of the plant; or

(C) In a condition not covered by the plant's operating and emergency procedures.

(iii) Any natural phenomenon or other external condition that poses an actual threat to the safety of the nuclear power plant or significantly hampers site personnel in the performance of duties necessary for the safe operation of the plant.

(iv) Any event that results or should have resulted in Emergency Core Cooling System (ECCS) discharge into the reactor coolant system as a result of a valid signal.

(v) Any event that results in a major loss of emergency assessment capability, offsite response capability, or communications capability (e.g., significant portion of control room indication, Emergency Notification System, or offsite notification system).

(vi) Any event that poses an actual threat to the safety of the nuclear power plant or significantly hampers site personnel in the performance of duties necessary for the safe operation of the nuclear power plant including fires, toxic gas releases, or radioactive releases.

(2) *Four-hour reports.* If not reported under paragraphs (a) or (b)(1) of this section, the licensee shall notify the NRC as soon as practical and in all cases, within four hours of the occurrence of any of the following:

(i) Any event, found while the reactor is shut down, that, had it been found while the reactor was in operation, would have resulted in the nuclear power plant, including its principal safety barriers, being seriously degraded or being in an unanalyzed condition that significantly compromises plant safety.

(ii) Any event or condition that results in manual or automatic actuation of any Engineered Safety Feature (ESF), including the Reactor Protection System (RPS). However, actuation of an ESF, including the RPS, that results from and is part of the preplanned sequence during testing or reactor operation need not be reported.

(iii) Any event or condition that alone could have prevented the fulfillment of the safety function of structures or systems that are needed to:

(A) Shut down the reactor and maintain it in a safe shutdown condition,

(B) Remove residual heat,

(C) Control the release of radioactive material, or

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[3] Commercial telephone number of the NRC Operations Center is (202) 951-0550.

(D) Mitigate the consequences of an accident.

(iv)(A) Any airborne radioactive release that exceeds 2 times the applicable concentrations of the limits specified in Appendix B, Table II of Part 20 of this chapter in unrestricted areas, when averaged over a time period of one hour.

(B) Any liquid effluent release that exceeds 2 times the limiting combined Maximum Permissible Concentration (MPC) (see Note 1 of Appendix B to Part 20 of this chapter) at the point of entry into the receiving water (i.e., unrestricted area) for all radionuclides except tritium and dissolved noble gases, when averaged over a time period of one hour. (Immediate notifications made under this paragraph also satisfy the requirements of paragraphs (a)(2) and (b)(2) of § 20.403 of Part 20 of this chapter.)

(v) Any event requiring the transport of a radioactively contaminated person to an offsite medical facility for treatment.

(vi) Any event or situation, related to the health and safety of the public or onsite personnel, or protection of the environment, for which a news release is planned or notification to other government agencies has been or will be made. Such an event may include an onsite fatality or inadvertent release of radioactively contaminated materials.

(vii) Any instance of:

(A) A defect in any spent fuel storage cask structure, system, or component which is important to safety; or

(B) A significant reduction in the effectiveness of any spent fuel storage cask confinement system during use of the storage cask under a general license issued under § 72.210 of this chapter.

A followup written report is required by § 72.216(b) of this chapter including a description of the means employed to repair any defects or damage and prevent recurrence, using instructions in § 72.4, within 30 days of the report submitted in paragraph (a). A copy of the written report must be sent to the administrator of the appropriate Nuclear Regulatory Commission regional office shown in appendix D to part 20 of this chapter.

(c) *Followup notification.* With respect to the telephone notifications made under paragraphs (a) and (b) of this section, in addition to making the required initial notification, each licensee, shall during the course of the event:

(1) *Immediately report* (i) any further degradation in the level of safety of the plant or other worsening plant conditions, including those that require the declaration of any of the Emergency Classes, if such a declaration has not been previously made, or (ii) any change from one Emergency Class to another, or (iii) a termination of the Emergency Class.

(2) *Immediately report* (i) the results of ensuing evaluations or assessments of plant conditions, (ii) the effectiveness of response or protective measures taken, and (iii) information related to plant behavior that is not understood.

(3) Maintain an open, continuous communication channel with the NRC Operations Center upon request by the NRC.

[48 FR 39046, Aug. 29, 1983; 48 FR 40882, Sept. 12, 1983; 55 FR 29194, July 18, 1990]

§ 50.73 Licensee event report system.

(a) *Reportable events.* (1) The holder of an operating license for a nuclear power plant (licensee) shall submit a Licensee Event Report (LER) for any event of the type described in this paragraph within 30 days after the discovery of the event. Unless otherwise specified in this section, the licensee shall report an event regardless of the plant mode or power level, and regardless of the significance of the structure, system, or component that initiated the event.

(2) The licensee shall report:

(i)(A) The completion of any nuclear plant shutdown required by the plant's Technical Specifications; or

(B) Any operation or condition prohibited by the plant's Technical Specifications; or

(C) Any deviation from the plant's Technical Specifications authorized pursuant to § 50.54(x) of this part.

(ii) Any event or condition that resulted in the condition of the nuclear power plant, including its principal safety barriers, being seriously degraded, or that resulted in the nuclear power plant being:

(A) In an unanalyzed condition that significantly compromised plant safety;

(B) In a condition that was outside the design basis of the plant; or

(C) In a condition not covered by the plant's operating and emergency procedures.

(iii) Any natural phenomenon or other external condition that posed an actual threat to the safety of the nuclear power plant or significantly hampered site personnel in the performance of duties necessary for the safe operation of the nuclear power plant.

(iv) Any event or condition that resulted in manual or automatic actuation of any Engineered Safety Feature (ESF), including the Reactor Protection System (RPS). However, actuation of an ESF, including the RPS, that resulted from and was part of the preplanned sequence during testing or reactor operation need not be reported.

(v) Any event or condition that alone could have prevented the fulfillment of the safety function of structures or systems that are needed to:

(A) Shut down the reactor and maintain it in a safe shutdown condition;

(B) Remove residual heat;

(C) Control the release of radioactive material; or

(D) Mitigate the consequences of an accident.

(vi) Events covered in paragraph (a)(2)(v) of this section may include one or more procedural errors, equipment failures, and/or discovery of design, analysis, fabrication, construction, and/or procedural inadequacies. However, individual component failures need not be reported pursuant to this paragraph if redundant equipment in the same system was operable and available to perform the required safety function.

(vii) Any event where a single cause or condition caused at least one independent train or channel to become inoperable in multiple systems or two independent trains or channels to become inoperable in a single system designed to:

(A) Shut down the reactor and maintain it in a safe shutdown condition;

(B) Remove residual heat;

(C) Control the release of radioactive material; or

(D) Mitigate the consequences of an accident.

(viii)(A) Any airborne radioactivity release that exceeded 2 times the applicable concentrations of the limits specified in Appendix B, Table II of Part 20 of this chapter in unrestricted areas, when averaged over a time period of one hour.

(B) Any liquid effluent release that exceeded 2 times the limiting combined Maximum Permissible Concentration (MPC) (see Note 1 of Appendix B to Part 20 of this chapter) at the point of entry into the receiving water (i.e., unrestricted area) for all radionuclides except tritium and dissolved noble gases, when averaged over a time period of one hour.

(ix) Reports submitted to the Commission in accordance with paragraph (a)(2)(viii) of this section also meet the effluent release reporting requirements of paragraph 20.405(a)(5) of Part 20 of this chapter.

(x) Any event that posed an actual threat to the safety of the nuclear power plant or significantly hampered site personnel in the performance of duties necessary for the safe operation of the nuclear power plant including fires, toxic gas releases, or radioactive releases.

(b) *Contents.* The Licensee Event Report shall contain:

(1) A brief abstract describing the major occurrences during the event, including all component or system failures that contributed to the event and significant corrective action taken or planned to prevent recurrence.

(2)(i) A clear, specific, narrative description of what occurred so that knowledgeable readers conversant with the design of commercial nuclear power plants, but not familiar with the details of a particular plant, can understand the complete event.

(ii) The narrative description must include the following specific information as appropriate for the particular event:

(A) Plant operating conditions before the event.

(B) Status of structures, components, or systems that were inoperable at the start of the event and that contributed to the event.

(C) Dates and approximate times of occurrences.

(D) The cause of each component or system failure or personnel error, if known.

(E) The failure mode, mechanism, and effect of each failed component, if known.

(F) The Energy Industry Identification System component function identifier and system name of each component or system referred to in the LER.

(*1*) The Energy Industry Identification System is defined in: IEEE Std 803-1983 (May 16, 1983) Recommended Practices for Unique Identification Plants and Related Facilities—Principles and Definitions.

(*2*) IEEE Std 803-1983 has been approved for incorporation by reference by the Director of the Federal Register.

A notice of any changes made to the material incorporated by reference will be published in the FEDERAL REGISTER. Copies may be obtained from the Institute of Electrical and Electronics Engineers, 345 East 47th Street, New York, NY 10017. IEEE Std 803-1983 is available for inspection at the NRC's Technical Library, which is located in the Phillips Building, 7920 Norfolk Avenue, Bethesda, Maryland; and at the Office of the Federal Register, 1100 L Street, NW, Washington, DC.

(G) For failures of components with multiple functions, include a list of systems or secondary functions that were also affected.

(H) For failure that rendered a train of a safety system inoperable, an estimate of the elapsed time from the discovery of the failure until the train was returned to service.

(I) The method of discovery of each component or system failure or procedural error.

(J)(*1*) Operator actions that affected the course of the event, including operator errors, procedural deficiencies, or both, that contributed to the event.

(*2*) For each personnel error, the licensee shall discuss:

(*i*) Whether the error was a cognitive error (e.g., failure to recognize the actual plant condition, failure to realize which systems should be functioning, failure to recognize the true nature of the event) or a procedural error;

(*ii*) Whether the error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure;

(*iii*) Any unusual characteristics of the work location (e.g., heat, noise) that directly contributed to the error; and

(*iv*) The type of personnel involved (i.e., contractor personnel, utility-licensed operator, utility nonlicensed operator, other utility personnel).

(K) Automatically and manually initiated safety system responses.

(L) The manufacturer and model number (or other identification) of each component that failed during the event.

(3) An assessment of the safety consequences and implications of the event. This assessment must include the availability of other systems or components that could have performed the same function as the components and systems that failed during the event.

(4) A description of any corrective actions planned as a result of the event, including those to reduce the probability of similar events occurring in the future.

(5) Reference to any previous similar events at the same plant that are known to the licensee.

(6) The name and telephone number of a person within the licensee's organization who is knowledgeable about the event and can provide additional information concerning the event and the plant's characteristics.

(c) *Supplemental information.* The Commission may require the licensee to submit specific additional information beyond that required by paragraph (b) of this section if the Commission finds that supplemental material is necessary for complete understanding of an unusually complex or significant event. These requests for supplemental information will be made in writing and the licensee shall submit, as specified in § 50.4, the requested information as a supplement to the initial LER.

(d) *Submission of reports.* Licensee Event Reports must be prepared on Form NRC 366 and submitted within 30 days of discovery of a reportable event or situation to the U.S. Nuclear Regulatory Commission, as specified in § 50.4.

(e) *Report legibility.* The reports and copies that licensees are required to submit to the Commission under the provisions of this section must be of sufficient quality to permit legible reproduction and micrographic processing.

(f) *Exemptions.* Upon written request from a licensee including adequate justification or at the initiation of the NRC staff, the NRC Executive Director for Operations may, by a letter to the licensee, grant exemptions to the reporting requirements under this section.

(g) *Reportable occurrences.* The requirements contained in this section replace all existing requirements for licensees to report "Reportable Occurrences" as defined in individual plant Technical Specifications.

[48 FR 33858, July 26, 1983, as amended at 49 FR 47824, Dec. 7, 1984; 51 FR 40310, Nov. 6, 1986]

§ 50.74 Notification of change in operator or senior operator status.

Each licensee shall notify the Commission in accordance with § 50.4 within 30 days of the following in regard to a licensed operator or senior operator:

(a) Permanent reassignment from the position for which the licensee has certified the need for a licensed operator or senior operator under § 55.31(a)(3) of this chapter;

(b) Termination of any operator or senior operator;

(c) Disability or illness as descrided in § 55.25 of this chapter.

[52 FR 9469, Mar. 25, 1987]

§ 50.75 Reporting and recordkeeping for decommissioning planning.

(a) This section establishes requirements for indicating to NRC how reasonable assurance will be provided that funds will be available for decommissioning. For electric utilities it consists of a step-wise procedure as provided in paragraphs (b), (c), (e), and (f) of this section. Funding for decommissioning of electric utilities is also subject to the regulation of agencies (e.g., Federal Energy Regulatory Commission (FERC) and State Public Utility Commissions) having jurisdiction over rate regulation. The requirements of this section, in particular paragraph (c), are in addition to, and not substitution for, other requirements, and are not intended to be used, by themselves, by other agencies to establish rates.

(b) Each electric utility applicant for or holder of an operating license for a production or utilization facility of the type and power level specified in paragraph (c) of this section shall submit a decommissioning report, as required by § 50.33(k) of this part containing a certification that financial assurance for decommissioning will be provided in an amount which may be more but not less than the amount stated in the table in paragraph (c)(1) of this section, adjusted annually using a rate at least equal to that stated in paragraph (c)(2) of this section, by one or more of the methods described in paragraph (e) of this section as acceptable to the Commission. The amount stated in the applicant's or licensee's certification may be based on a cost estimate for decommissioning the facility. As part of the certification, a copy of the financial instrument obtained to satisfy the requirements of paragraph (e) of this section is to be submitted to NRC.

(c) Table of minimum amounts (January 1986 dollars) required to demonstrate reasonable assurance of funds for decommissioning by reactor type and power level, P (in MWt); adjustment factor.[1]

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[1] Amounts are based on activities related to the definition of "Decommission" in § 50.2 of this part and do not include the cost of removal and disposal of spent fuel or of nonradioactive structures and materials beyond that necessary to terminate the license.

	Millions
(1)(i) For a PWR:	
greater than or equal to 3400 MWt	$105
between 1200 MWt and 3400 MWt (For a PWR of less than 1200 MWt, use P=1200 MWt)	$(75+0.0088P)
(ii) For a BWR:	
greater than or equal to 3400 MWt	$135
between 1200 MWt and 3400 MWt (For a BWR of less than 1200 MWt, use P=1200 MWt)	$(104+0.009P)

(2) An adjustment factor at least equal to $0.65\ L + 0.13\ E + 0.22\ B$ is to be used where L and E are escalation factors for labor and energy, respectively, and are to be taken from regional data of U.S. Department of Labor Bureau of Labor Statistics and B is an escalation factor for waste burial and is to be taken from NRC report NUREG-1307, "Report on Waste Burial Charges."

(d) Each non-electric utility applicant for or holder of an operating license for a production or utilization facility shall submit a decommissioning report as required by § 50.33(k) of this part containing a cost estimate for decommissioning the facility, an indication of which method or methods described in paragraph (e) of this section as acceptable to the Commission will be used to provide funds for decommissioning, and a description of the means of adjusting the cost estimate and associated funding level periodically over the life of the facility.

(e)(1) As provided in paragraphs (e) (2) and (3) of this section, financial assurance is to be provided by the following methods:

(i) Prepayment. Prepayment is the deposit prior to the start of operation into an account segregated from licensee assets and outside the licensee's administrative control of cash or liquid assets such that the amount of funds would be sufficient to pay decommissioning costs. Prepayment may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities.

(ii) External sinking fund. An external sinking fund is a fund established and maintained by setting funds aside periodically in an account segregated from licensee assets and outside the licensee's administrative control in which the total amount of funds would be sufficient to pay decommissioning costs at the time termination of operation is expected. An external sinking fund may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities.

(iii) A surety method, insurance, or other guarantee method. These methods guarantee that decommissioning costs will be paid should the licensee default. A surety method may be in the form of a surety bond, letter of credit, or line of credit. Any surety method or insurance used to provide financial insurance for decommissioning must contain the following conditions:

(A) The surety method or insurance must be open-ended or, if written for a specified term, such as five years, must be renewed automatically unless 90 days or more prior to the renewal date, the issuer notifies the Commission, the beneficiary, and the licensee of its intention not to renew. The surety or insurance must also provide that the full face amount be paid to the beneficiary automatically prior to the expiration without proof of forfeiture if the licensee fails to provide a replacement acceptable to the Commission within 30 days after receipt of notification of cancellation.

(B) The surety or insurance must be payable to a trust established for decommissioning costs. The trustee and trust must be acceptable to the Commission. An acceptable trustee includes an appropriate State or Federal government agency or an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

(C) The surety method or insurance must remain in effect until the Commission has terminated the license.

(2) For a licensee other than an electric utility, acceptable methods of providing financial assurance for decommissioning are—

(i) Prepayment;

(ii) An external sinking fund, in which deposits are made at least annually, coupled with a surety method or insurance, the value of which may decrease by the amount being accumulated in the sinking fund.

(iii) A surety method, insurance, or other guarantee method. A parent company guarantee of funds for decommissioning costs based on a financial test may be used if the guarantee and test are as contained in Appendix A of 10 CFR Part 30. A parent company guarantee may not be used in combination with other financial methods to satisfy the requirements of this section.

(iv) In the case of Federal, State, or local government licensees, a statement of intent containing a cost estimate for decommissioning, and indicating that funds for decommissioning will be obtained when necessary.

(3) For an electric utility, acceptable methods of providing financial assurance for decommissioning are—

(i) Prepayment;

(ii) An external sinking fund in which deposits are made at least annually;

(iii) A surety method or insurance; and

(iv) In the case of Federal government licensees, a statement of intent containing a cost estimate for decommissioning or an amount based on paragraph (c) of this section, and indicating that funds for decommissioning will be obtained when necessary.

(f) Each licensee shall at or about 5 years prior to the projected end of operation submit a preliminary decommissioning plan containing a cost estimate for decommissioning and an up-to-date assessment of the major technical factors that could affect planning for decommissioning. Factors to be considered in submitting this information include—

(1) The decommissioning alternative anticipated to be used. The requirements of § 50.82(b)(1) must be considered at this time;

(2) Major technical actions necessary to carry out decommissioning safely;

(3) The current situation with regard to disposal of high-level and low-level radioactive waste;

(4) Residual radioactivity criteria;

(5) Other site specific factors which could affect decommissioning planning and cost.

If necessary, this submittal shall also include plans for adjusting levels of funds assured for decommissioning to demonstrate that a reasonable level of assurance will be provided that funds will be available when needed to cover the costs of decommissioning.

(g) Each licensee shall keep records of information important to the safe and effective decommissioning of the facility in an identified location until the license is terminated by the Commission. If records of relevant information are kept for other purposes, reference to these records and their locations may be used. Information the Commission considers important to decommissioning consists of—

(1) Records of spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site. These records may be limited to instances when significant contamination remains after any cleanup procedures or when there is reasonable likelihood that contaminants may have spread to inaccessible areas as in the case of possible seepage into porous materials such as concrete. These records must include any known information on identification of involved nuclides, quantities, forms, and concentrations.

(2) As-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used and/or stored and of locations of possible inaccessible contamination such as buried pipes which may be subject to contamination. If required drawings are referenced, each relevant document need not be indexed individually. If drawings are not available, the licensee shall substitute appropriate records of available information concerning these areas and locations.

(3) Records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning, and records of the funding method used for assuring

funds if either a funding plan or certification is used.

[53 FR 24049, June 27, 1988]

US/IAEA SAFEGUARDS AGREEMENT

§ 50.78 Installation information and verification.

Each holder of a construction permit shall, if requested by the Commission, submit installation information on Form N-71, permit verification thereof by the International Atomic Energy Agency, and take such other action as may be necessary to implement the US/IAEA Safeguards Agreement, in the manner set forth in §§ 75.6 and 75.11 through 75.14 of this chapter.

[49 FR 19627, May 9, 1984]

TRANSFERS OF LICENSES—CREDITORS' RIGHTS—SURRENDER OF LICENSES

§ 50.80 Transfer of licenses.

(a) No license for a production or utilization facility, or any right thereunder, shall be transferred, assigned, or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of the license to any person, unless the Commission shall give its consent in writing.

(b) An application for transfer of a license shall include as much of the information described in §§ 50.33 and 50.34 of this part with respect to the identity and technical and financial qualifications of the proposed transferee as would be required by those sections if the application were for an initial license, and, if the license to be issued is a class 103 license, the information required by § 50.33a. The Commission may require additional information such as data respecting proposed safeguards against hazards from radioactive materials and the applicant's qualifications to protect against such hazards. The application shall include also a statement of the purposes for which the transfer of the license is requested, the nature of the transaction necessitating or making desirable the transfer of the license, and an agreement to limit access to Restricted Data pursuant to § 50.37. The Commission may require any person who submits an application for license pursuant to the provisions of this section to file a written consent from the existing licensee or a certified copy of an order or judgment of a court of competent jurisdiction attesting to the person's right (subject to the licensing requirements of the Act and these regulations) to possession of the facility involved.

(c) After appropriate notice to interested persons, including the existing licensee, and observance of such procedures as may be required by the Act or regulations or orders of the Commission, the Commission will approve an application for the transfer of a license, if the Commission determines:

(1) That the proposed transferee is qualified to be the holder of the license; and

(2) That transfer of the license is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto.

[26 FR 9546, Oct. 10, 1961, as amended at 35 FR 19661, Dec. 29, 1970; 38 FR 3956, Feb. 9, 1973]

§ 50.81 Creditor regulations.

(a) Pursuant to section 184 of the Act, the Commission consents, without individual application, to the creation of any mortgage, pledge, or other lien upon any production or utilization facility not owned by the United States which is the subject of a license or upon any leasehold or other interest in such facility: *Provided:*

(1) That the rights of any creditor so secured may be exercised only in compliance with and subject to the same requirements and restrictions as would apply to the licensee pursuant to the provisions of the license, the Atomic Energy Act of 1954, as amended, and regulations issued by the Commission pursuant to said Act; and

(2) That no creditor so secured may take possession of the facility pursuant to the provisions of this section prior to either the issuance of a license from the Commission authorizing such possession or the transfer of the license.

(b) Any creditor so secured may apply for transfer of the license covering such facility by filing an application for transfer of the license pursuant to § 50.80(b). The Commission will act upon such application pursuant to § 50.80 (c).

(c) Nothing contained in this regulation shall be deemed to affect the means of acquiring, or the priority of, any tax lien or other lien provided by law.

(d) As used in this section: (1) "License" includes any license or construction permit which may be issued by the Commission with regard to the facility;

(2) "Creditor" includes, without implied limitation, the trustee under any mortgage, pledge or lien on a facility made to secure any creditor, any trustee or receiver of the facility appointed by a court of competent jurisdiction in any action brought for the benefit of any creditor secured by such mortgage, pledge or lien, any purchaser of such facility at the sale thereof upon foreclosure of such mortgage, pledge, or lien or upon exercise of any power of sale contained therein, or any assignee of any such purchaser.

[26 FR 9546, Oct. 10, 1961, as amended at 32 FR 2562, Feb. 7, 1967]

§ 50.82 Application for termination of license.

(a) Any licensee may apply to the Commission for authority to surrender a license voluntarily and to decommission the facility. For a facility that permanently ceases operation after July 27, 1988, this application must be made within two years following permanent cessation of operations, and in no case later than one year prior to expiration of the operating license. Each application for termination of license must be accompanied, or preceded, by a proposed decommissioning plan. For a facility which has permanently ceased operation prior to July 27, 1988, requirements for contents of the decommissioning plan as specified in paragraphs (b) through (d) of this section may be modified with approval of the Commission to reflect the fact that the decommissioning process has been initiated previously.

(b) The proposed decommissioning plan must include—

(1) The choice of the alternative for decommissioning with a description of activities involved.

(i) For an electric utility licensee, an alternative is acceptable if it provides for completion of decommissioning within 60 years. Consideration will be given to an alternative which provides for completion of decommissioning beyond 60 years only when necessary to protect the public health and safety. Factors to be considered in evaluating an alternative which provides for completion of decommissioning beyond 60 years are set out in paragraph (b)(1)(iii) of this section.

(ii) For a licensee other than an electric utility, an alternative is acceptable if it provides for completion of decommissioning without significant delay. Consideration will be given to an alternative which provides for delayed completion of decommissioning only when necessary to protect the public health and safety. Factors to be considered in evaluating an alternative which provides for delayed completion of decommissioning are set out in paragraph (b)(1)(iii) of this section.

(iii) Factors to be considered in making the evaluations required by paragraphs (b)(1)(i) and (b)(1)(ii) of this section include unavailability of waste disposal capacity and other site specific factors affecting the licensee's capability to carry out decommissioning safely, including presence of other nuclear facilities at the site.

(2) A description of controls and limits on procedures and equipment to protect occupational and public health and safety;

(3) A description of the planned final radiation survey;

(4) An updated cost estimate for the chosen alternative for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and plan for assuring the availability of adequate funds for completion of decommissioning.

(5) A description of technical specifications, quality assurance provisions and physical security plan provisions in place during decommissioning.

(c) Decommissioning plans which propose an alternative that delays completion of decommissioning by in cluding a period of storage or long-term surveillance must provide that—

(1) Funds needed to complete decommissioning be placed into an account segregated from licensee assets and outside the licensee's administrative control during the storage or surveillance period, or a surety method or fund statement of intent be maintained in accordance with the criteria of § 50.75(e), and

(2) Means be included for adjusting cost estimates and associated funding levels over the storage or surveillance period.

(d) For decommissioning plans in which the major dismantlement activities are delayed by first placing the facility in storage, planning for these delayed activities may be less detailed. Updated detailed plans must be submitted and approved prior to the start of these activities.

(e) If the decommissioning plan demonstrates that the decommissioning will be performed in accordance with the regulations in this chapter and will not be inimical to the common defense and security or to the health and safety of the public, and after notice to interested persons, the Commission will approve the plan subject to such conditions and limitations as it deems appropriate and necessary and issue an order authorizing the decommissioning.

(f) The Commission will terminate the license if it determines that—

(1) The decommissioning has been performed in accordance with the approved decommissioning plan and the order authorizing decommissioning; and

(2) The terminal radiation survey and associated documentation demonstrates that the facility and site are suitable for release for unrestricted use.

[53 FR 24051, June 27, 1988]

AMENDMENT OF LICENSE OR CONSTRUCTION PERMIT AT REQUEST OF HOLDER

§ 50.90 Application for amendment of license or construction permit.

Whenever a holder of a license or construction permit desires to amend the license or permit, application for an amendment must be filed with the Commission, as specified in § 50.4, fully describing the changes desired, and following as far as applicable, the form prescribed for original applications.

[51 FR 40310, Nov. 6, 1986]

§ 50.91 Notice for public comment; State consultation.

The Commission will use the following procedures on an application requesting an amendment to an operating license for a facility licensed under § 50.21(b) or § 50.22 or for a testing facility:

(a) *Notice for public comment.* (1) At the time a licensee requests an amendment, it must provide to the Commission, in accordance with the distribution requirements specified in § 50.4, its analysis about the issue of no significant hazards consideration using the standards in § 50.92.

(2)(i) The Commission may publish in the FEDERAL REGISTER under § 2.105 an individual notice of proposed action for an amendment for which it makes a proposed determination that no significant hazards consideration is involved, or, at least once every 30 days, publish a periodic FEDERAL REGISTER notice of proposed actions which identifies each amendment issued and each amendment proposed to be issued since the last such periodic notice, or it may publish both such notices.

(ii) For each amendment proposed to be issued, the notice will (A) contain the staff's proposed determination, under the standards in § 50.92, (B) provide a brief description of the amendment and of the facility involved, (C) solicit public comments on the proposed determination, and (D) provide for a 30-day comment period.

(iii) The comment period will begin on the day after the date of the publication of the first notice, and, normally, the amendment will not be granted until after this comment period expires.

(3) The Commission may inform the public about the final disposition of an amendment request for which it has made a proposed determination of no significant hazards consideration either by issuing an individual notice

of issuance under § 2.106 of this chapter or by publishing such a notice in its periodic system of FEDERAL REGISTER notices. In either event, it will not make and will not publish a final determination on no significant hazards consideration, unless it receives a request for a hearing on that amendment request.

(4) Where the Commission makes a final determination that no significant hazards consideration is involved and that the amendment should be issued, the amendment will be effective upon issuance, even if adverse public comments have been received and even if an interested person meeting the provisions for intervention called for in § 2.714 of this chapter has filed a request for a hearing. The Commission need hold any required hearing only after it issues an amendment, unless it determines that a significant hazards consideration is involved in which case the Commission will provide an opportunity for a prior hearing.

(5) Where the Commission finds that an emergency situation exists, in that failure to act in a timely way would result in derating or shutdown of a nuclear power plant, or in prevention of either resumption of operation or of increase in power output up to the plant's licensed power level, it may issue a license amendment involving no significant hazards consideration without prior notice and opportunity for a hearing or for public comment. In such a situation, the Commission will not publish a notice of proposed determination on no significant hazards consideration, but will publish a notice of issuance under § 2.106 of this chapter, providing for opportunity for a hearing and for public comment after issuance. The Commission expects its licensees to apply for license amendments in timely fashion. It will decline to dispense with notice and comment on the determination of no significant hazards consideration if it determines that the licensee has abused the emergency provision by failing to make timely application for the amendment and thus itself creating the emergency. Whenever an emergency situation exists, a licensee requesting an amendment must explain why this emergency situation occurred and why it could not avoid this situation, and the Commission will assess the licensee's reasons for failing to file an application sufficiently in advance of that event.

(6) Where the Commission finds that exigent circumstances exist, in that a licensee and the Commission must act quickly and that time does not permit the Commission to publish a FEDERAL REGISTER notice allowing 30 days for prior public comment, and it also determines that the amendment involves no significant hazards considerations, it:

(i)(A) Will either issue a FEDERAL REGISTER notice providing notice of an opportunity for hearing and allowing at least two weeks from the date of the notice for prior public comment; or

(B) Will use local media to provide reasonable notice to the public in the area surrounding a licensee's facility of the licensee's amendment and of its proposed determination as described in paragraph (a)(2) of this section, consulting with the licensee on the proposed media release and on the geographical area of its coverage;

(ii) Will provide for a reasonable opportunity for the public to comment, using its best efforts to make available to the public whatever means of communication it can for the public to respond quickly, and, in the case of telephone comments, have these comments recorded or transcribed, as necessary and appropriate;

(iii) When it has issued a local media release, may inform the licensee of the public's comments, as necessary and appropriate;

(iv) Will publish a notice of issuance under § 2.106;

(v) Will provide a hearing after issuance, if one has been requested by a person who satisfies the provisions for intervention called for in § 2.714 of this chapter;

(vi) Will require the licensee to explain the exigency and why the licensee cannot avoid it, and use its normal public notice and comment procedures in paragraph (a)(2) of this section if it determines that the licensee has failed to use its best efforts to make a timely application for the amendment in order to create the exigency and to take advantage of this procedure.

(7) Where the Commission finds that significant hazards considerations are involved, it will issue a FEDERAL REGISTER notice providing an opportunity for a prior hearing even in an emergency situation, unless it finds an imminent danger to the health or safety of the public, in which case it will issue an appropriate order or rule under 10 CFR Part 2.

(b) *State consultation.* (1) At the time a licensee requests an amendment, it must notify the State in which its facility is located of its request by providing that State with a copy of its application and its reasoned analysis about no significant hazards considerations and indicate on the application that it has done so. (The Commission will make available to the licensee the name of the appropriate State official designated to receive such amendments.)

(2) The Commission will advise the State of its proposed determination about no significant hazards consideration normally by sending it a copy of the FEDERAL REGISTER notice.

(3) The Commission will make available to the State official designated to consult with it about its proposed determination the names of the Project Manager or other NRC personnel it designated to consult with the State. The Commission will consider any comments of that State official. If it does not hear from the State in a timely manner, it will consider that the State has no interest in its determination; nonetheless, to ensure that the State is aware of the application, before it issues the amendment, it will make a good faith effort to telephone that official. (Inability to consult with a responsible State offical following good faith attempts will not prevent the Commission from making effective a license amendment involving no significant hazards consideration.)

(4) The Commission will make a good faith attempt to consult with the State before it issues a license amendment involving no significant hazards consideration. If, however, it does not have time to use its normal consultation procedures because of an emergency situation, it will attempt to telephone the appropriate State official. (Inability to consult with a responsible State official following good faith attempts will not prevent the Commission from making effective a license amendment involving no significant hazards consideration, if the Commission deems it necessary in an emergency situation.)

(5) After the Commission issues the requested amendment, it will send a copy of its determinaton to the State.

(c) *Caveats about State consultation.* (1) The State consultation procedures in paragraph (b) of this section do not give the State a right:

(i) To veto the Commission's proposed or final determination;

(ii) To a hearing on the determination before the amendment becomes effective; or

(iii) To insist upon a postponement of the determination or upon issuance of the amendment.

(2) These procedures do not alter present provisions of law that reserve to the Commission exclusive responsibility for setting and enforcing radiological health and safety requirements for nuclear power plants.

[51 FR 7765, Mar. 6, 1986, as amended at 51 FR 40310, Nov. 6, 1986]

§ 50.92 Issuance of amendment.

(a) In determining whether an amendment to a license or construction permit will be issued to the applicant, the Commission will be guided by the considerations which govern the issuance of initial licenses or construction permits to the extent applicable and appropriate. If the application involves the material alteration of a licensed facility, a construction permit will be issued before the issuance of the amendment to the license. If the amendment involves a significant hazards consideration, the Commission will give notice of its proposed action (1) pursuant to § 2.105 of this chapter before acting thereon and (2) as soon as practicable after the application has been docketed.

(b) The Commission will be particularly sensitive to a license amendment request that involves irreversible consequences (such as one that permits a significant increase in the amount of effluents or radiation emitted by a nuclear power plant).

(c) The Commission may make a final determination, pursuant to the procedures in § 50.91, that a proposed amendment to an operating license for a facility licensed under § 50.21(b) or § 50.22 or for a testing facility involves no significant hazards consideration, if operation of the facility in accordance with the proposed amendment would not:

(1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or

(2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or

(3) Involve a significant reduction in a margin of safety.

[51 FR 7767, Mar. 6, 1986]

Revocation, Suspension, Modification, Amendment of Licenses and Construction Permits, Emergency Operations by the Commission

§ 50.100 Revocation, suspension, modification of licenses and construction permits for cause.

A license or construction permit may be revoked, suspended, or modified, in whole or in part, for any material false statement in the application for license or in the supplemental or other statement of fact required of the applicant; or because of conditions revealed by the application for license or statement of fact or any report, record, inspection, or other means, which would warrant the Commission to refuse to grant a license on an original application (other than those relating to §§ 50.51, 50.42(a), and 50.43(b) of this part); or for failure to construct or operate a facility in accordance with the terms of the construction permit or license, provided that failure to make timely completion of the proposed construction or alteration of a facility under a construction permit shall be governed by the provisions of § 50.55(b); or for violation of, or failure to observe, any of the terms and provisions of the act, regulations, license, permit, or order of the Commission.

§ 50.101 Retaking possession of special nuclear material.

Upon revocation of a license, the Commission may immediately cause the retaking of possession of all special nuclear material held by the licensee.

[21 FR 355, Jan. 19, 1956, as amended at 40 FR 8790, Mar. 3, 1975]

§ 50.102 Commission order for operation after revocation.

Whenever the Commission finds that the public convenience and necessity, or the Department finds that the production program of the Department requires continued operation of a production or utilization facility, the license for which has been revoked, the Commission may, after consultation with the appropriate federal or state regulatory agency having jurisdiction, order that possession be taken of such facility and that it be operated for a period of time as, in the judgment of the Commission, the public convenience and necessity or the production program of the Department may require, or until a license for operation of the facility shall become effective. Just compensation shall be paid for the use of the facility.

[40 FR 8790, Mar. 3, 1975]

§ 50.103 Suspension and operation in war or national emergency.

(a) Whenever Congress declares that a state of war or national emergency exists, the Commission, if it finds it necessary to the common defense and security, may,

(1) Suspend any license it has issued.

(2) Cause the recapture of special nuclear material.

(3) Order the operation of any licensed facility.

(4) Order entry into any plant or facility in order to recapture special nuclear material or to operate the facility.

(b) Just compensation shall be paid for any damages caused by recapture of special nuclear material or by operation of any facility, pursuant to this section.

[21 FR 355, Jan. 19, 1956, as amended at 35 FR 11416, July 17, 1970; 40 FR 8790, Mar. 3, 1975]

BACKFITTING

§ 50.109 Backfitting.

(a)(1) Backfitting is defined as the modification of or addition to systems, structures, components, or design of a facility; or the design approval or manufacturing license for a facility; or the procedures or organization required to design, construct or operate a facility; any of which may result from a new or amended provision in the Commission rules or the imposition of a regulatory staff position interpreting the Commission rules that is either new or different from a previously applicable staff position after:

(i) The date of issuance of the construction permit for the facility for facilities having construction permits issued after October 21, 1985; or

(ii) Six months before the date of docketing of the operating license application for the facility for facilities having construction permits issued before October 21, 1985; or

(iii) The date of issuance of the operating license for the facility for facilities having operating licenses; or

(iv) The date of issuance of the design approval under Appendix M, N, or O of Part 52.

(2) Except as provided in paragraph (a)(4) of this section, the Commission shall require a systematic and documented analysis pursuant to paragraph (c) of this section for backfits which it seeks to impose.

(3) Except as provided in paragraph (a)(4) of this section, the Commission shall require the backfitting of a facility only when it determines, based on the analysis described in paragraph (c) of this section, that there is a substantial increase in the overall protection of the public health and safety or the common defense and security to be derived from the backfit and that the direct and indirect costs of implementation for that facility are justified in view of this increased protection.

(4) The provisions of paragraphs (a)(2) and (a)(3) of this section are inapplicable and, therefore, backfit analysis is not required and the standards in paragraph (a)(3) of this section do not apply where the Commission or staff, as appropriate, finds and declares, with appropriated documented evaluation for its finding, either:

(i) That a modification is necessary to bring a facility into compliance with a license or the rules or orders of the Commission, or into conformance with written commitments by the licensee; or

(ii) That regulatory action is necessary to ensure that the facility provides adequate protection to the health and safety of the public and is in accord with the common defense and security; or

(iii) That the regulatory action involves defining or redefining what level of protection to the public health and safety or common defense and security should be regarded as adequate.

(5) The Commission shall always require the backfitting of a facility if it determines that such regulatory action is necessary to ensure that the facility provides adequate protection to the health and safety or the public and is in accord with the common defense and security.

(6) The documented evaluation required by paragraph (a)(4) of this section shall include a statement of the objectives of and reasons for the modification and the basis for invoking the exception. If immediately effective regulatory action is required, then the documented evaluation may follow rather than precede the regulatory action.

(7) If there are two or more ways to achieve compliance with a license or the rules or orders of the Commission, or with written licensee commitments, or there are two or more ways to reach a level of protection which is adequate, then ordinarily the applicant or licensee is free to choose the way which best suits its purposes. However, should it be necessary or appropriate for the Commission to prescribe a specific way to comply with its requirements or to achieve adequate protection, then cost may be a factor in selecting the way, provided that the objective of compliance or adequate protection is met.

(b) Paragraph (a)(3) of this section shall not apply to backfits imposed prior to October 21, 1985.

(c) In reaching the determination required by paragraph (a)(3) of this section, the Commission will consider how the backfit should be scheduled in light of other ongoing regulatory activities at the facility and, in addition, will consider information available concerning any of the following factors as may be appropriate and any other information relevant and material to the proposed backfit:

(1) Statement of the specific objectives that the proposed backfit is designed to achieve;

(2) General description of the activity that would be required by the licensee or applicant in order to complete the backfit;

(3) Potential change in the risk to the public from the accidental off-site release of radioactive material;

(4) Potential impact on radiological exposure of facility employees;

(5) Installation and continuing costs associated with the backfit, including the cost of facility downtime or the cost of construction delay;

(6) The potential safety impact of changes in plant or operational complexity, including the relationship to proposed and existing regulatory requirements;

(7) The estimated resource burden on the NRC associated with the proposed backfit and the availability of such resources;

(8) The potential impact of differences in facility type, design or age on the relevancy and practicality of the proposed backfit;

(9) Whether the proposed backfit is interim or final and, if interim, the justification for imposing the proposed backfit on an interim basis.

(d) No licensing action will be withheld during the pendency of backfit analyses required by the Commission's rules.

(e) The Executive Director for Operations shall be responsible for implementation of this section, and all analyses required by this section shall be approved by the Executive Director for Operations or his designee.

[53 FR 20610, June 6, 1988, as amended at 54 FR 15398, Apr. 18, 1989]

ENFORCEMENT

§ 50.110 Violations.

An injunction or other court order may be obtained prohibiting any violation of any provision of the Atomic Energy Act of 1954, as amended, or Title II of the Energy Reorganization Act of 1974, or any regulation or order issued thereunder. A court order may be obtained for the payment of a civil penalty imposed pursuant to section 234 of the Act for violation of section 53, 57, 62, 63, 81, 82, 101, 103, 104, 107, or 109 of the Act, or section 206 of the Energy Reorganization Act of 1974, or any rule, regulation, or order issued thereunder, or any term, condition, or limitation of any license issued thereunder, or for any violation for which a license may be revoked under section 186 of the Act. Any person who willfully violates any provision of the Act or any regulation or order issued thereunder may be guilty of a crime and, upon conviction, may be punished by fine or imprisonment or both, as provided by law.

[40 FR 8790, Mar. 3, 1975, as amended at 42 FR 25721, May 19, 1977]

APPENDIX A—GENERAL DESIGN CRITERIA FOR NUCLEAR POWER PLANTS

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INTRODUCTION

Pursuant to the provisions of § 50.34, an application for a construction permit must include the principal design criteria for a proposed facility. The principal design criteria establish the necessary design, fabrication, construction, testing, and performance requirements for structures, systems, and components important to safety; that is, structures, systems, and components that provide reasonable assurance that the facility can be operated without undue risk to the health and safety of the public.

These General Design Criteria establish minimum requirements for the principal design criteria for water-cooled nuclear power plants similar in design and location to plants for which construction permits have been issued by the Commission. The General Design Criteria are also considered to be generally applicable to other types of nuclear power units and are intended to provide guidance in establishing the principal design criteria for such other units.

The development of these General Design Criteria is not yet complete. For example, some of the definitions need further amplification. Also, some of the specific design requirements for structures, systems, and components important to safety have not as yet been suitably defined. Their omission does not relieve any applicant from considering these matters in the design of a specific facility and satisfying the necessary safety requirements. These matters include:

(1) Consideration of the need to design against single failures of passive components in fluid systems important to safety. (See Definition of Single Failure.)

(2) Consideration of redundancy and diversity requirements for fluid systems important to safety. A "system" could consist of a number of subsystems each of which is separately capable of performing the specified system safety function. The minimum acceptable redundancy and diversity of subsystems and components within a subsystem, and the required interconnection and independence of the subsystems have not

yet been developed or defined. (See Criteria 34, 35, 38, 41, and 44.)

(3) Consideration of the type, size, and orientation of possible breaks in components of the reactor coolant pressure boundary in determining design requirements to suitably protect against postulated loss-of-coolant accidents. (See Definition of Loss of Coolant Accidents.)

(4) Consideration of the possibility of systematic, nonrandom, concurrent failures of redundant elements in the design of protection systems and reactivity control systems. (See Criteria 22, 24, 26, and 29.)

It is expected that the criteria will be augmented and changed from time to time as important new requirements for these and other features are developed.

There will be some water-cooled nuclear power plants for which the General Design Criteria are not sufficient and for which additional criteria must be identified and satisfied in the interest of public safety. In particular, it is expected that additional or different criteria will be needed to take into account unusual sites and environmental conditions, and for water-cooled nuclear power units of advanced design. Also, there may be water-cooled nuclear power units for which fulfillment of some of the General Design Criteria may not be necessary or appropriate. For plants such as these, departures from the General Design Criteria must be identified and justified.

DEFINITIONS AND EXPLANATIONS

Nuclear power unit. A nuclear power unit means a nuclear power reactor and associated equipment necessary for electric power generation and includes those structures, systems, and components required to provide reasonable assurance the facility can be operated without undue risk to the health and safety of the public.

Loss of coolant accidents. Loss of coolant accidents mean those postulated accidents that result from the loss of reactor coolant at a rate in excess of the capability of the reactor coolant makeup system from breaks in the reactor coolant pressure boundary, up to and including a break equivalent in size to the double-ended rupture of the largest pipe of the reactor coolant system.[1]

Single failure. A single failure means an occurrence which results in the loss of capability of a component to perform its intended safety functions. Multiple failures resulting from a single occurrence are considered to be a single failure. Fluid and electric systems are considered to be designed against an assumed single failure if neither (1) a single failure of any active component (assuming passive components function properly) nor (2) a single failure of a passive component (assuming active components function properly), results in a loss of the capability of the system to perform its safety functions.[2]

Anticipated operational occurrences. Anticipated operational occurrences mean those conditions of normal operation which are expected to occur one or more times during the life of the nuclear power unit and include but are not limited to loss of power to all recirculation pumps, tripping of the turbine generator set, isolation of the main condenser, and loss of all offsite power.

CRITERIA

I. Overall Requirements

Criterion 1—Quality standards and records. Structures, systems, and components important to safety shall be designed, fabricated, erected, and tested to quality standards commensurate with the importance of the safety functions to be performed. Where generally recognized codes and standards are used, they shall be identified and evaluated to determine their applicability, adequacy, and sufficiency and shall be supplemented or modified as necessary to assure a quality product in keeping with the required safety function. A quality assurance program shall be established and implemented in order to provide adequate assurance that these structures, systems, and components will satisfactorily perform their safety functions. Appropriate records of the design, fabrication, erection, and testing of structures, systems, and components important to safety shall be maintained by or under the control of the nuclear power unit licensee throughout the life of the unit.

Criterion 2—Design bases for protection against natural phenomena. Structures, systems, and components important to safety shall be designed to withstand the effects of natural phenomena such as earthquakes, tornadoes, hurricanes, floods, tsunami, and seiches without loss of capability to perform their safety functions. The design bases for these structures, systems, and components shall reflect: (1) Appropriate consideration of the most severe of the natural phenomena that have been historically reported for the site and surrounding area, with sufficient margin for the limited accuracy, quantity, and period of time in which the historical data have been accumulated, (2) appropriate combinations of the effects of normal and accident conditions with the effects of the natural phenomena and (3) the importance of the safety functions to be performed.

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[1] Further details relating to the type, size, and orientation of postulated breaks in specific components of the reactor coolant pressure boundary are under development.

[2] Single failures of passive components in electric systems should be assumed in designing against a single failure. The conditions under which a single failure of a passive component in a fluid system should be considered in designing the system against a single failure are under development.

Criterion 3—Fire protection. Structures, systems, and components important to safety shall be designed and located to minimize, consistent with other safety requirements, the probability and effect of fires and explosions. Noncombustible and heat resistant materials shall be used wherever practical throughout the unit, particularly in locations such as the containment and control room. Fire detection and fighting systems of appropriate capacity and capability shall be provided and designed to minimize the adverse effects of fires on structures, systems, and components important to safety. Firefighting systems shall be designed to assure that their rupture or inadvertent operation does not significantly impair the safety capability of these structures, systems, and components.

Criterion 4—Environmental and dynamic effects design bases. Structures, systems, and components important to safety shall be designed to accommodate the effects of and to be compatible with the environmental conditions associated with normal operation, maintenance, testing, and postulated accidents, including loss-of-coolant accidents. These structures, systems, and components shall be appropriately protected against dynamic effects, including the effects of missiles, pipe whipping, and discharging fluids, that may result from equipment failures and from events and conditions outside the nuclear power unit. However, dynamic effects associated with postulated pipe ruptures in nuclear power units may be excluded from the design basis when analyses reviewed and approved by the Commission demonstrate that the probability of fluid system piping rupture is extremely low under conditions consistent with the design basis for the piping.

Criterion 5—Sharing of structures, systems, and components. Structures, systems, and components important to safety shall not be shared among nuclear power units unless it can be shown that such sharing will not significantly impair their ability to perform their safety functions, including, in the event of an accident in one unit, an orderly shutdown and cooldown of the remaining units.

II. Protection by Multiple Fission Product Barriers

Criterion 10—Reactor design. The reactor core and associated coolant, control, and protection systems shall be designed with appropriate margin to assure that specified acceptable fuel design limits are not exceeded during any condition of normal operation, including the effects of anticipated operational occurrences.

Criterion 11—Reactor inherent protection. The reactor core and associated coolant systems shall be designed so that in the power operating range the net effect of the prompt inherent nuclear feedback characteristics tends to compensate for a rapid increase in reactivity.

Criterion 12—Suppression of reactor power oscillations. The reactor core and associated coolant, control, and protection systems shall be designed to assure that power oscillations which can result in conditions exceeding specified acceptable fuel design limits are not possible or can be reliably and readily detected and suppressed.

Criterion 13—Instrumentation and control. Instrumentation shall be provided to monitor variables and systems over their anticipated ranges for normal operation, for anticipated operational occurrences, and for accident conditions as appropriate to assure adequate safety, including those variables and systems that can affect the fission process, the integrity of the reactor core, the reactor coolant pressure boundary, and the containment and its associated systems. Appropriate controls shall be provided to maintain these variables and systems within prescribed operating ranges.

Criterion 14—Reactor coolant pressure boundary. The reactor coolant pressure boundary shall be designed, fabricated, erected, and tested so as to have an extremely low probability of abnormal leakage, of rapidly propagating failure, and of gross rupture.

Criterion 15—Reactor coolant system design. The reactor coolant system and associated auxiliary, control, and protection systems shall be designed with sufficient margin to assure that the design conditions of the reactor coolant pressure boundary are not exceeded during any condition of normal operation, including anticipated operational occurrences.

Criterion 16—Containment design. Reactor containment and associated systems shall be provided to establish an essentially leak-tight barrier against the uncontrolled release of radioactivity to the environment and to assure that the containment design conditions important to safety are not exceeded for as long as postulated accident conditions require.

Criterion 17—Electric power systems. An onsite electric power system and an offsite electric power system shall be provided to permit functioning of structures, systems, and components important to safety. The safety function for each system (assuming the other system is not functioning) shall be to provide sufficient capacity and capability to assure that (1) specified acceptable fuel design limits and design conditions of the reactor coolant pressure boundary are not exceeded as a result of anticipated operational occurrences and (2) the core is cooled and containment integrity and other vital functions are maintained in the event of postulated accidents.

The onsite electric power supplies, including the batteries, and the onsite electric distribution system, shall have sufficient independence, redundancy, and testability to perform their safety functions assuming a single failure.

Electric power from the transmission network to the onsite electric distribution system shall be supplied by two physically independent circuits (not necessarily on separate rights of way) designed and located so as to minimize to the extent practical the likelihood of their simultaneous failure under operating and postulated accident and environmental conditions. A switchyard common to both circuits is acceptable. Each of these circuits shall be designed to be available in sufficient time following a loss of all onsite alternating current power supplies and the other offsite electric power circuit, to assure that specified acceptable fuel design limits and design conditions of the reactor coolant pressure boundary are not exceeded. One of these circuits shall be designed to be available within a few seconds following a loss-of-coolant accident to assure that core cooling, containment integrity, and other vital safety functions are maintained.

Provisions shall be included to minimize the probability of losing electric power from any of the remaining supplies as a result of, or coincident with, the loss of power generated by the nuclear power unit, the loss of power from the transmission network, or the loss of power from the onsite electric power supplies.

Criterion 18—Inspection and testing of electric power systems. Electric power systems important to safety shall be designed to permit appropriate periodic inspection and testing of important areas and features, such as wiring, insulation, connections, and switchboards, to assess the continuity of the systems and the condition of their components. The systems shall be designed with a capability to test periodically (1) the operability and functional performance of the components of the systems, such as onsite power sources, relays, switches, and buses, and (2) the operability of the systems as a whole and, under conditions as close to design as practical, the full operation sequence that brings the systems into operation, including operation of applicable portions of the protection system, and the transfer of power among the nuclear power unit, the offsite power system, and the onsite power system.

Criterion 19—Control room. A control room shall be provided from which actions can be taken to operate the nuclear power unit safely under normal conditions and to maintain it in a safe condition under accident conditions, including loss-of-coolant accidents. Adequate radiation protection shall be provided to permit access and occupancy of the control room under accident conditions without personnel receiving radiation exposures in excess of 5 rem whole body, or its equivalent to any part of the body, for the duration of the accident.

Equipment at appropriate locations outside the control room shall be provided (1) with a design capability for prompt hot shutdown of the reactor, including necessary instrumentation and controls to maintain the unit in a safe condition during hot shutdown, and (2) with a potential capability for subsequent cold shutdown of the reactor through the use of suitable procedures.

III. Protection and Reactivity Control Systems

Criterion 20—Protection system functions. The protection system shall be designed (1) to initiate automatically the operation of appropriate systems including the reactivity control systems, to assure that specified acceptable fuel design limits are not exceeded as a result of anticipated operational occurrences and (2) to sense accident conditions and to initiate the operation of systems and components important to safety.

Criterion 21—Protection system reliability and testability. The protection system shall be designed for high functional reliability and inservice testability commensurate with the safety functions to be performed. Redundancy and independence designed into the protection system shall be sufficient to assure that (1) no single failure results in loss of the protection function and (2) removal from service of any component or channel does not result in loss of the required minimum redundancy unless the acceptable reliability of operation of the protection system can be otherwise demonstrated. The protection system shall be designed to permit periodic testing of its functioning when the reactor is in operation, including a capability to test channels independently to determine failures and losses of redundancy that may have occurred.

Criterion 22—Protection system independence. The protection system shall be designed to assure that the effects of natural phenomena, and of normal operating, maintenance, testing, and postulated accident conditions on redundant channels do not result in loss of the protection function, or shall be demonstrated to be acceptable on some other defined basis. Design techniques, such as functional diversity or diversity in component design and principles of operation, shall be used to the extent practical to prevent loss of the protection function.

Criterion 23—Protection system failure modes. The protection system shall be designed to fail into a safe state or into a state demonstrated to be acceptable on some other defined basis if conditions such as disconnection of the system, loss of energy (e.g., electric power, instrument air), or postulated adverse environments (e.g., extreme heat or cold, fire, pressure, steam, water, and radiation) are experienced.

Criterion 24—Separation of protection and control systems. The protection system shall be separated from control systems to the extent that failure of any single control system component or channel, or failure or removal from service of any single protection system component or channel which is common to the control and protection systems leaves intact a system satisfying all reliability, redundancy, and independence requirements of the protection system. Interconnection of the protection and control systems shall be limited so as to assure that safety is not significantly impaired.

Criterion 25—Protection system requirements for reactivity control malfunctions. The protection system shall be designed to assure that specified acceptable fuel design limits are not exceeded for any single malfunction of the reactivity control systems, such as accidental withdrawal (not ejection or dropout) of control rods.

Criterion 26—Reactivity control system redundancy and capability. Two independent reactivity control systems of different design principles shall be provided. One of the systems shall use control rods, preferably including a positive means for inserting the rods, and shall be capable of reliably controlling reactivity changes to assure that under conditions of normal operation, including anticipated operational occurrences, and with appropriate margin for malfunctions such as stuck rods, specified acceptable fuel design limits are not exceeded. The second reactivity control system shall be capable of reliably controlling the rate of reactivity changes resulting from planned, normal power changes (including xenon burnout) to assure acceptable fuel design limits are not exceeded. One of the systems shall be capable of holding the reactor core subcritical under cold conditions.

Criterion 27—Combined reactivity control systems capability. The reactivity control systems shall be designed to have a combined capability, in conjunction with poison addition by the emergency core cooling system, of reliably controlling reactivity changes to assure that under postulated accident conditions and with appropriate margin for stuck rods the capability to cool the core is maintained.

Criterion 28—Reactivity limits. The reactivity control systems shall be designed with appropriate limits on the potential amount and rate of reactivity increase to assure that the effects of postulated reactivity accidents can neither (1) result in damage to the reactor coolant pressure boundary greater than limited local yielding nor (2) sufficiently disturb the core, its support structures or other reactor pressure vessel internals to impair significantly the capability to cool the core. These postulated reactivity accidents shall include consideration of rod ejection (unless prevented by positive means), rod dropout, steam line rupture, changes in reactor coolant temperature and pressure, and cold water addition.

Criterion 29—Protection against anticipated operational occurrences. The protection and reactivity control systems shall be designed to assure an extremely high probability of accomplishing their safety functions in the event of anticipated operational occurrences.

IV. Fluid Systems

Criterion 30—Quality of reactor coolant pressure boundary. Components which are part of the reactor coolant pressure boundary shall be designed, fabricated, erected, and tested to the highest quality standards practical. Means shall be provided for detecting and, to the extent practical, identifying the location of the source of reactor coolant leakage.

Criterion 31—Fracture prevention of reactor coolant pressure boundary. The reactor coolant pressure boundary shall be designed with sufficient margin to assure that when stressed under operating, maintenance, testing, and postulated accident conditions (1) the boundary behaves in a nonbrittle manner and (2) the probability of rapidly propagating fracture is minimized. The design shall reflect consideration of service temperatures and other conditions of the boundary material under operating, maintenance, testing, and postulated accident conditions and the uncertainties in determining (1) material properties, (2) the effects of irradiation on material properties, (3) residual, steady state and transient stresses, and (4) size of flaws.

Criterion 32—Inspection of reactor coolant pressure boundary. Components which are part of the reactor coolant pressure boundary shall be designed to permit (1) periodic inspection and testing of important areas and features to assess their structural and leaktight integrity, and (2) an appropriate material surveillance program for the reactor pressure vessel.

Criterion 33—Reactor coolant makeup. A system to supply reactor coolant makeup for protection against small breaks in the reactor coolant pressure boundary shall be provided. The system safety function shall be to assure that specified acceptable fuel design limits are not exceeded as a result of reactor coolant loss due to leakage from the reactor coolant pressure boundary and rupture of small piping or other small components which are part of the boundary. The system shall be designed to assure that for onsite electric power system operation (assuming offsite power is not available) and for offsite electric power system operation (assuming onsite power is not available) the system safety function can be accomplished using the piping, pumps, and valves used to maintain coolant inventory during normal reactor operation.

Criterion 34—Residual heat removal. A system to remove residual heat shall be provided. The system safety function shall be to transfer fission product decay heat and other residual heat from the reactor core at a rate such that specified acceptable fuel design limits and the design conditions of the reactor coolant pressure boundary are not exceeded.

Suitable redundancy in components and features, and suitable interconnections, leak detection, and isolation capabilities shall be provided to assure that for onsite electric power system operation (assuming offsite power is not available) and for offsite electric power system operation (assuming onsite power is not available) the system safety function can be accomplished, assuming a single failure.

Criterion 35—Emergency core cooling. A system to provide abundant emergency core cooling shall be provided. The system safety function shall be to transfer heat from the reactor core following any loss of reactor coolant at a rate such that (1) fuel and clad damage that could interfere with continued effective core cooling is prevented and (2) clad metal-water reaction is limited to negligible amounts.

Suitable redundancy in components and features, and suitable interconnections, leak detection, isolation, and containment capabilities shall be provided to assure that for onsite electric power system operation (assuming offsite power is not available) and for offsite electric power system operation (assuming onsite power is not available) the system safety function can be accomplished, assuming a single failure.

Criterion 36—Inspection of emergency core cooling system. The emergency core cooling system shall be designed to permit appropriate periodic inspection of important components, such as spray rings in the reactor pressure vessel, water injection nozzles, and piping, to assure the integrity and capability of the system.

Criterion 37—Testing of emergency core cooling system. The emergency core cooling system shall be designed to permit appropriate periodic pressure and functional testing to assure (1) the structural and leaktight integrity of its components, (2) the operability and performance of the active components of the system, and (3) the operability of the system as a whole and, under conditions as close to design as practical, the performance of the full operational sequence that brings the system into operation, including operation of applicable portions of the protection system, the transfer between normal and emergency power sources, and the operation of the associated cooling water system.

Criterion 38—Containment heat removal. A system to remove heat from the reactor containment shall be provided. The system safety function shall be to reduce rapidly, consistent with the functioning of other associated systems, the containment pressure and temperature following any loss-of-coolant accident and maintain them at acceptably low levels.

Suitable redundancy in components and features, and suitable interconnections, leak detection, isolation, and containment capabilities shall be provided to assure that for onsite electric power system operation (assuming offsite power is not available) and for offsite electric power system operation (assuming onsite power is not available) the system safety function can be accomplished, assuming a single failure.

Criterion 39—Inspection of containment heat removal system. The containment heat removal system shall be designed to permit appropriate periodic inspection of important components, such as the torus, sumps, spray nozzles, and piping to assure the integrity and capability of the system.

Criterion 40—Testing of containment heat removal system. The containment heat removal system shall be designed to permit appropriate periodic pressure and functional testing to assure (1) the structural and leaktight integrity of its components, (2) the operability and performance of the active components of the system, and (3) the operability of the system as a whole, and under conditions as close to the design as practical the performance of the full operational sequence that brings the system into operation, including operation of applicable portions of the protection system, the transfer between normal and emergency power sources, and the operation of the associated cooling water system.

Criterion 41—Containment atmosphere cleanup. Systems to control fission products, hydrogen, oxygen, and other substances which may be released into the reactor containment shall be provided as necessary to reduce, consistent with the functioning of other associated systems, the concentration and quality of fission products released to the environment following postulated accidents, and to control the concentration of hydrogen or oxygen and other substances in the containment atmosphere following postulated accidents to assure that containment integrity is maintained.

Each system shall have suitable redundancy in components and features, and suitable interconnections, leak detection, isolation, and containment capabilities to assure that for onsite electric power system operation (assuming offsite power is not available) and for offsite electric power system operation (assuming onsite power is not available) its safety function can be accomplished, assuming a single failure.

Criterion 42—Inspection of containment atmosphere cleanup systems. The containment atmosphere cleanup systems shall be designed to permit appropriate periodic inspection of important components, such as filter frames, ducts, and piping to assure the integrity and capability of the systems.

Criterion 43—Testing of containment atmosphere cleanup systems. The containment atmosphere cleanup systems shall be designed to permit appropriate periodic pressure and functional testing to assure (1) the structural and leaktight integrity of its components, (2) the operability and performance of the active components of the systems such as fans, filters, dampers, pumps, and valves and (3) the operability of the systems as a whole and, under conditions as close to design as practical, the performance of the full operational sequence that brings the systems into operation, including operation of applicable portions of the protection system, the transfer between normal and emergency power sources, and the operation of associated systems.

Criterion 44—Cooling water. A system to transfer heat from structures, systems, and components important to safety, to an ultimate heat sink shall be provided. The system safety function shall be to transfer the combined heat load of these structures, systems, and components under normal operating and accident conditions.

Suitable redundancy in components and features, and suitable interconnections, leak detection, and isolation capabilities shall be provided to assure that for onsite electric power system operation (assuming offsite power is not available) and for offsite electric power system operation (assuming onsite power is not available) the system safety function can be accomplished, assuming a single failure.

Criterion 45—Inspection of cooling water system. The cooling water system shall be designed to permit appropriate periodic inspection of important components, such as heat exchangers and piping, to assure the integrity and capability of the system.

Criterion 46—Testing of cooling water system. The cooling water system shall be designed to permit appropriate periodic pressure and functional testing to assure (1) the structural and leaktight integrity of its components, (2) the operability and the performance of the active components of the system, and (3) the operability of the system as a whole and, under conditions as close to design as practical, the performance of the full operational sequence that brings the system into operation for reactor shutdown and for loss-of-coolant accidents, including operation of applicable portions of the protection system and the transfer between normal and emergency power sources.

V. Reactor Containment

Criterion 50—Containment design basis. The reactor containment structure, including access openings, penetrations, and the containment heat removal system shall be designed so that the containment structure and its internal compartments can accommodate, without exceeding the design leakage rate and with sufficient margin, the calculated pressure and temperature conditions resulting from any loss-of-coolant accident. This margin shall reflect consideration of (1) the effects of potential energy sources which have not been included in the determination of the peak conditions, such as energy in steam generators and as required by § 50.44 energy from metal-water and other chemical reactions that may result from degradation but not total failure of emergency core cooling functioning, (2) the limited experience and experimental data available for defining accident phenomena and containment responses, and (3) the conservatism of the calculational model and input parameters.

Criterion 51—Fracture prevention of containment pressure boundary. The reactor containment boundary shall be designed with sufficient margin to assure that under operating, maintenance, testing, and postulated accident conditions (1) its ferritic materials behave in a nonbrittle manner and (2) the probability of rapidly propagating fracture is minimized. The design shall reflect consideration of service temperatures and other conditions of the containment boundary material during operation, maintenance, testing, and postulated accident conditions, and the uncertainties in determining (1) material properties, (2) residual, steady state, and transient stresses, and (3) size of flaws.

Criterion 52—Capability for containment leakage rate testing. The reactor containment and other equipment which may be subjected to containment test conditions shall be designed so that periodic integrated leakage rate testing can be conducted at containment design pressure.

Criterion 53—Provisions for containment testing and inspection. The reactor containment shall be designed to permit (1) appropriate periodic inspection of all important areas, such as penetrations, (2) an appropriate surveillance program, and (3) periodic testing at containment design pressure of the leaktightness of penetrations which have resilient seals and expansion bellows.

Criterion 54—Piping systems penetrating containment. Piping systems penetrating primary reactor containment shall be provided with leak detection, isolation, and containment capabilities having redundancy, reliability, and performance capabilities which reflect the importance to safety of isolating these piping systems. Such piping systems shall be designed with a capability to test periodically the operability of the isolation valves and associated apparatus and to determine if valve leakage is within acceptable limits.

Criterion 55—Reactor coolant pressure boundary penetrating containment. Each line that is part of the reactor coolant pressure boundary and that penetrates primary reactor containment shall be provided with containment isolation valves as follows, unless it can be demonstrated that the containment isolation provisions for a specific class of lines, such as instrument lines, are acceptable on some other defined basis:

(1) One locked closed isolation valve inside and one locked closed isolation valve outside containment; or

(2) One automatic isolation valve inside and one locked closed isolation valve outside containment; or

(3) One locked closed isolation valve inside and one automatic isolation valve outside containment. A simple check valve may not be used as the automatic isolation valve outside containment; or

(4) One automatic isolation valve inside and one automatic isolation valve outside containment. A simple check valve may not be used as the automatic isolation valve outside containment.

Isolation valves outside containment shall be located as close to containment as practical and upon loss of actuating power, automatic isolation valves shall be designed to take the position that provides greater safety.

Other appropriate requirements to minimize the probability or consequences of an accidental rupture of these lines or of lines connected to them shall be provided as necessary to assure adequate safety. Determination of the appropriateness of these requirements, such as higher quality in design, fabrication, and testing, additional provisions for inservice inspection, protection against more severe natural phenomena, and additional isolation valves and containment, shall include consideration of the population density, use characteristics, and physical characteristics of the site environs.

Criterion 56—Primary containment isolation. Each line that connects directly to the containment atmosphere and penetrates primary reactor containment shall be provided with containment isolation valves as follows, unless it can be demonstrated that the containment isolation provisions for a specific class of lines, such as instrument lines, are acceptable on some other defined basis:

(1) One locked closed isolation valve inside and one locked closed isolation valve outside containment; or

(2) One automatic isolation valve inside and one locked closed isolation valve outside containment; or

(3) One locked closed isolation valve inside and one automatic isolation valve outside containment. A simple check valve may not be used as the automatic isolation valve outside containment; or

(4) One automatic isolation valve inside and one automatic isolation valve outside containment. A simple check valve may not be used as the automatic isolation valve outside containment.

Isolation valves outside containment shall be located as close to the containment as practical and upon loss of actuating power, automatic isolation valves shall be designed to take the position that provides greater safety.

Criterion 57—Closed system isolation valves. Each line that penetrates primary reactor containment and is neither part of the reactor coolant pressure boundary nor connected directly to the containment atmosphere shall have at least one containment isolation valve which shall be either automatic, or locked closed, or capable of remote manual operation. This valve shall be outside containment and located as close to the containment as practical. A simple check valve may not be used as the automatic isolation valve.

VI. Fuel and Radioactivity Control

Criterion 60—Control of releases of radioactive materials to the environment. The nuclear power unit design shall include means to control suitably the release of radioactive materials in gaseous and liquid effluents and to handle radioactive solid wastes produced during normal reactor operation, including anticipated operational occurrences. Sufficient holdup capacity shall be provided for retention of gaseous and liquid effluents containing radioactive materials, particularly where unfavorable site environmental conditions can be expected to impose unusual operational limitations upon the release of such effluents to the environment.

Criterion 61—Fuel storage and handling and radioactivity control. The fuel storage and handling, radioactive waste, and other systems which may contain radioactivity shall be designed to assure adequate safety under normal and postulated accident conditions. These systems shall be designed (1) with a capability to permit appropriate periodic inspection and testing of components important to safety, (2) with suitable shielding for radiation protection, (3) with appropriate containment, confinement, and filtering systems, (4) with a residual heat removal capability having reliability and testability that reflects the importance to safety of decay heat and other residual heat removal, and (5) to prevent significant reduction in fuel storage coolant inventory under accident conditions.

Criterion 62—Prevention of criticality in fuel storage and handling. Criticality in the fuel storage and handling system shall be prevented by physical systems or processes, preferably by use of geometrically safe configurations.

Criterion 63—Monitoring fuel and waste storage. Appropriate systems shall be provided in fuel storage and radioactive waste systems and associated handling areas (1) to detect conditions that may result in loss of residual heat removal capability and excessive radiation levels and (2) to initiate appropriate safety actions.

Criterion 64—Monitoring radioactivity releases. Means shall be provided for monitoring the reactor containment atmosphere, spaces containing components for recirculation of loss-of-coolant accident fluids, effluent discharge paths, and the plant environs for radioactivity that may be released from normal operations, including anticipated operational occurrences, and from postulated accidents.

[36 FR 3256, Feb. 20, 1971, as amended at 36 FR 12733, July 7, 1971; 41 FR 6258, Feb. 12, 1976; 43 FR 50163, Oct. 27, 1978; 51 FR 12505, Apr. 11, 1986; 52 FR 41294, Oct. 27, 1987]

APPENDIX B—QUALITY ASSURANCE CRITERIA FOR NUCLEAR POWER PLANTS AND FUEL REPROCESSING PLANTS

Introduction. Every applicant for a construction permit is required by the provisions of § 50.34 to include in its preliminary safety analysis report a description of the quality assurance program to be applied to the design, fabrication, construction, and testing of the structures, systems, and components of the facility. Every applicant for an operating license is required to include, in its final safety analysis report, information pertaining to the managerial and administrative controls to be used to assure safe operation. Nuclear power plants and fuel reprocessing plants include structures, systems, and components that prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public. This appendix establishes quality assurance requirements for the design, construction, and operation of those structures, systems, and components. The pertinent requirements of this appendix apply to all activities affecting the safety-related functions of those structures, systems, and components; these activities include designing, purchasing, fabricating, handling, shipping, storing, cleaning, erecting, installing, inspecting, testing, operating, maintaining, repairing, refueling, and modifying.

As used in this appendix, "quality assurance" comprises all those planned and systematic actions necessary to provide adequate confidence that a structure, system, or component will perform satisfactorily in service. Quality assurance includes quality control, which comprises those quality assurance actions related to the physical characteristics of a material, structure, component, or system which provide a means to control the quality of the material, structure, component, or system to predetermined requirements.

I. ORGANIZATION

The applicant[1] shall be responsible for the establishment and execution of the quality assurance program. The applicant may delegate to others, such as contractors, agents, or consultants, the work of establishing and executing the quality assurance program, or any part thereof, but shall retain responsibility therefor. The authority and duties of persons and organizations performing activities affecting the safety-related functions of structures, systems, and components shall be clearly established and delineated in writing. These activities include both the performing functions of attaining quality objectives and the quality assurance functions. The quality assurance functions are those of (a) assuring that an appropriate quality assurance program is established and effectively executed and (b) verifying, such as by checking, auditing, and inspection, that activities affecting the safety-related functions have been correctly performed. The persons and organizations performing quality assurance functions shall have sufficient authority and organizational freedom to identify quality problems; to initiate, recommend, or provide solutions; and to verify implementation of solutions. Such persons and organizations performing quality assurance functions shall report to a management level such that this required authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations, are provided. Because of the many variables involved, such as the number of personnel, the type of activity being performed, and the location or locations where activities are performed, the organizational structure for executing the quality assurance program may take various forms provided that the persons and organizations assigned the quality assurance functions have this required authority and organizational freedom. Irrespective of the organizational structure, the individual(s) assigned the responsibility for assuring effective execution of any portion of the quality assurance program at any location where activities subject to this appendix are being performed shall have direct access to such levels of management as may be necessary to perform this function.

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[1] While the term "applicant" is used in these criteria, the requirements are, of course, applicable after such a person has received a license to construct and operate a nuclear powerplant or a fuel reprocessing plant. These criteria will also be used for guidance in evaluating the adequacy of quality assurance programs in use by holders of construction permits and operating licenses.

II. Quality Assurance Program

The applicant shall establish at the earliest practicable time, consistent with the schedule for accomplishing the activities, a quality assurance program which complies with the requirements of this appendix. This program shall be documented by written policies, procedures, or instructions and shall be carried out throughout plant life in accordance with those policies, procedures, or instructions. The applicant shall identify the structures, systems, and components to be covered by the quality assurance program and the major organizations participating in the program, together with the designated functions of these organizations. The quality assurance program shall provide control over activities affecting the quality of the identified structures, systems, and components, to an extent consistent with their importance to safety. Activities affecting quality shall be accomplished under suitably controlled conditions. Controlled conditions include the use of appropriate equipment; suitable environmental conditions for accomplishing the activity, such as adequate cleanness; and assurance that all prerequisites for the given activity have been satisfied. The program shall take into account the need for special controls, processes, test equipment, tools, and skills to attain the required quality, and the need for verification of quality by inspection and test. The program shall provide for indoctrination and training of personnel performing activities affecting quality as necessary to assure that suitable proficiency is achieved and maintained. The applicant shall regularly review the status and adequacy of the quality assurance program. Management of other organizations participating in the quality assurance program shall regularly review the status and adequacy of that part of the quality assurance program which they are executing.

III. Design Control

Measures shall be established to assure that applicable regulatory requirements and the design basis, as defined in § 50.2 and as specified in the license application, for those structures, systems, and components to which this appendix applies are correctly translated into specifications, drawings, procedures, and instructions. These measures shall include provisions to assure that appropriate quality standards are specified and included in design documents and that deviations from such standards are controlled. Measures shall also be established for the selection and review for suitability of application of materials, parts, equipment, and processes that are essential to the safety-related functions of the structures, systems and components.

Measures shall be established for the identification and control of design interfaces and for coordination among participating design organizations. These measures shall include the establishment of procedures among participating design organizations for the review, approval, release, distribution, and revision of documents involving design interfaces.

The design control measures shall provide for verifying or checking the adequacy of design, such as by the performance of design reviews, by the use of alternate or simplified calculational methods, or by the performance of a suitable testing program. The verifying or checking process shall be performed by individuals or groups other than those who performed the original design, but who may be from the same organization. Where a test program is used to verify the adequacy of a specific design feature in lieu of other verifying or checking processes, it shall include suitable qualifications testing of a prototype unit under the most adverse design conditions. Design control measures shall be applied to items such as the following: reactor physics, stress, thermal, hydraulic, and accident analyses; compatibility of materials; accessibility for inservice inspection, maintenance, and repair; and delineation of acceptance criteria for inspections and tests.

Design changes, including field changes, shall be subject to design control measures commensurate with those applied to the original design and be approved by the organization that performed the original design unless the applicant designates another responsible organization.

IV. PROCUREMENT DOCUMENT CONTROL

Measures shall be established to assure that applicable regulatory requirements, design bases, and other requirements which are necessary to assure adequate quality are suitably included or referenced in the documents for procurement of material, equipment, and services, whether purchased by the applicant or by its contractors or subcontractors. To the extent necessary, procurement documents shall require contractors or subcontractors to provide a quality assurance program consistent with the pertinent provisions of this appendix.

V. INSTRUCTIONS, PROCEDURES, AND DRAWINGS

Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

VI. DOCUMENT CONTROL

Measures shall be established to control the issuance of documents, such as instructions, procedures, and drawings, including changes thereto, which prescribe all activities affecting quality. These measures shall assure that documents, including changes, are reviewed for adequacy and approved for release by authorized personnel and are distributed to and used at the location where the prescribed activity is performed. Changes to documents shall be reviewed and approved by the same organizations that performed the original review and approval unless the applicant designates another responsible organization.

VII. CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES

Measures shall be established to assure that purchased material, equipment, and services, whether purchased directly or through contractors and subcontractors, conform to the procurement documents. These measures shall include provisions, as appropriate, for source evaluation and selection, objective evidence of quality furnished by the contractor or subcontractor, inspection at the contractor or subcontractor source, and examination of products upon delivery. Documentary evidence that material and equipment conform to the procurement requirements shall be available at the nuclear powerplant or fuel reprocessing plant site prior to installation or use of such material and equipment. This documentary evidence shall be retained at the nuclear powerplant or fuel reprocessing plant site and shall be sufficient to identify the specific requirements, such as codes, standards, or specifications, met by the purchased material and equipment. The effectiveness of the control of quality by contractors and subcontractors shall be assessed by the applicant or designee at intervals consistent with the importance, complexity, and quantity of the product or services.

VIII. IDENTIFICATION AND CONTROL OF MATERIALS, PARTS, AND COMPONENTS

Measures shall be established for the identification and control of materials, parts, and components, including partially fabricated assemblies. These measures shall assure that identification of the item is maintained by heat number, part number, serial number, or other appropriate means, either on the item or on records traceable to the item, as required throughout fabrication, erection, installation, and use of the item. These identification and control measures shall be designed to prevent the use of incorrect or defective material, parts, and components.

IX. CONTROL OF SPECIAL PROCESSES

Measures shall be established to assure that special processes, including welding, heat treating, and nondestructive testing, are controlled and accomplished by qualified personnel using qualified procedures in accordance with applicable codes, standards, specifications, criteria, and other special requirements.

X. INSPECTION

A program for inspection of activities affecting quality shall be established and executed by or for the organization performing the activity to verify conformance with the documented instructions, procedures, and drawings for accomplishing the activity. Such inspection shall be performed by individuals other than those who performed the activity being inspected. Examinations, measurements, or tests of material or products processed shall be performed for each work operation where necessary to assure quality. If inspection of processed material or products is impossible or disadvantageous, indirect control by monitoring processing methods, equipment, and personnel shall be provided. Both inspection and process monitoring shall be provided when control is inadequate without both. If mandatory inspection hold points, which require witnessing or inspecting by the applicant's designated representative and beyond which work shall not proceed without the consent of its designated representative are required, the specific hold points shall be indicated in appropriate documents.

XI. TEST CONTROL

A test program shall be established to assure that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents. The test program shall include, as appropriate, proof tests prior to installation, preoperational tests, and operational tests during nuclear power plant or fuel reprocessing plant operation, of structures, systems, and components. Test procedures shall include provisions for assuring that all prerequisites for the given test have been met, that adequate test instrumentation is available and used, and that the test is performed under suitable environmental conditions. Test results shall be documented and evaluated to assure that test requirements have been satisfied.

XII. CONTROL OF MEASURING AND TEST EQUIPMENT

Measures shall be established to assure that tools, gages, instruments, and other measuring and testing devices used in activities affecting quality are properly controlled, calibrated, and adjusted at specified periods to maintain accuracy within necessary limits.

XIII. HANDLING, STORAGE AND SHIPPING

Measures shall be established to control the handling, storage, shipping, cleaning and preservation of material and equipment in accordance with work and inspection instructions to prevent damage or deterioration. When necessary for particular products, special protective environments, such as inert gas atmosphere, specific moisture content levels, and temperature levels, shall be specified and provided.

XIV. INSPECTION, TEST, AND OPERATING STATUS

Measures shall be established to indicate, by the use of markings such as stamps, tags, labels, routing cards, or other suitable means, the status of inspections and tests performed upon individual items of the nuclear power plant or fuel reprocessing plant. These measures shall provide for the identification of items which have satisfactorily passed required inspections and tests, where necessary to preclude inadvertent bypassing of such inspections and tests. Measures shall also be established for indicating the operating status of structures, systems, and components of the nuclear power plant or fuel reprocessing plant, such as by tagging valves and switches, to prevent inadvertent operation.

XV. NONCONFORMING MATERIALS, PARTS, OR COMPONENTS

Measures shall be established to control materials, parts, or components which do not conform to requirements in order to prevent their inadvertent use or installation. These measures shall include, as appropriate, procedures for identification, documentation, segregation, disposition, and notification to affected organizations. Nonconforming items shall be reviewed and accepted, rejected, repaired or reworked in accordance with documented procedures.

XVI. CORRECTIVE ACTION

Measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition. The identification of the significant condition adverse to quality, the cause of the condition, and the corrective action taken shall be documented and reported to appropriate levels of management.

XVII. QUALITY ASSURANCE RECORDS

Sufficient records shall be maintained to furnish evidence of activities affecting quality. The records shall include at least the following: Operating logs and the results of reviews, inspections, tests, audits, monitoring of work performance, and materials analyses. The records shall also include closely-related data such as qualifications of personnel, procedures, and equipment. Inspection and test records shall, as a minimum, identify the inspector or data recorder, the type of observation, the results, the acceptability, and the action taken in connection with any deficiencies noted. Records shall be identifiable and retrievable. Consistent with applicable regulatory requirements, the applicant shall establish requirements concerning record retention, such as duration, location, and assigned responsibility.

XVIII. AUDITS

A comprehensive system of planned and periodic audits shall be carried out to verify compliance with all aspects of the quality assurance program and to determine the effectiveness of the program. The audits shall be performed in accordance with the written procedures or check lists by appropriately trained personnel not having direct responsibilities in the areas being audited. Audit results shall be documented and reviewed by management having responsibility in the area audited. Followup action, including reaudit of deficient areas, shall be taken where indicated.

[35 FR 10499, June 27, 1970, as amended at 36 FR 18301, Sept. 11, 1971; 40 FR 3210D, Jan. 20, 1975]

APPENDIX C—A GUIDE FOR THE FINANCIAL DATA AND RELATED INFORMATION REQUIRED TO ESTABLISH FINANCIAL QUALIFICATIONS FOR FACILITY CONSTRUCTION PERMITS

GENERAL INFORMATION

This appendix is intended to apprise applicants for licenses to construct production or utilization facilities of the types described in § 50.21(b) or § 50.22, or testing facilities, of the general kinds of financial data and other related information that will demonstrate the financial qualification of the applicant to carry out the activities for which the permit is sought. The kind and depth of information described in this guide is not intended to be a rigid and absolute requirement. In some instances, additional pertinent material may be needed. In any case, the applicant should include information other than that specified, if such information is pertinent to establishing the applicant's financial ability to construct the proposed facility.

It is important to observe also that both § 50.33(f) and this appendix distinguish between applicants which are established organizations and those which are newly-formed entities organized primarily for the purpose of engaging in the activity for which the permit is sought. Those in the former category will normally have a history of operating experience and be able to submit financial statements reflecting the financial results of past operations. With respect, however, to the applicant which is a newly formed company established primarily for the purpose of carrying out the licensed activity, with little or no prior operating history, somewhat more detailed data and supporting documentation will generally be necessary. For this reason, the appendix describes separately the scope of information to be included in applications by each of these two classes of applicants.

In determining an applicant's financial qualification, the Commission will require the minimum amount of information necessary for that purpose. No special forms are prescribed for submitting the information. In many cases, the financial information usually contained in current annual financial reports, including summary data of prior years, will be sufficient for the Commission's needs. The Commission reserves the right, however, to require additional financial information at the construction permit stage, particularly in cases in which the proposed power generating facility will be commonly owned by two or more existing companies or in which financing depends upon long-term arrangements for sharing of the power from the facility by two or more electrical generating companies.

Applicants are encouraged to consult with the Commission with respect to any questions they may have relating to the requirements of the Commission's regulations or the information set forth in this appendix.

I. APPLICANTS WHICH ARE ESTABLISHED ORGANIZATIONS

A. Applications for construction permits

1. *Estimate of construction costs.* For electric utilities, each applicant's estimate of the total cost of the proposed facility should be broken down as follows and be accompanied by a statement describing the bases from which the estimate is derived:

(a) Total nuclear production plant costs	$
(b) Transmission, distribution, and general plant costs	$
(c) Nuclear fuel inventory cost for first core [1]	$
Total estimated cost	$

If the fuel is to be acquired by lease or other arrangement than purchase, the application should so state. The items to be included in these categories should be the same as those defined in the applicable electric plant and nuclear fuel inventory accounts prescribed by the Federal Energy Regulatory Commission or an explanation given as to any departure therefrom.

Since the composition of construction cost estimates for production and utilization facilities other than nuclear power reactors will vary according to the type of facility, no particular format is suggested for submitting such estimates. The estimate should, however, be itemized by categories of cost in sufficient detail to permit an evaluation of its reasonableness.

2. *Source of construction funds.* The application should include a brief statement of the applicant's general financial plan for financing the cost of the facility, identifying the source or sources upon which the applicant relies for the necessary construction funds, e.g., internal sources such as undistributed earnings and depreciation accruals, or external sources such as borrowings.

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[1] Section 2.790 of 10 CFR Part 2 and § 9.5 of 10 CFR Part 9 indicate the circumstances under which information submitted by applicants may be withheld from public disclosure.

3. *Applicant's financial statements.* The application should also include the applicant's latest published annual financial report, together with any current interim financial statements that are pertinent. If an annual financial report is not published, the balance sheet and operating statement covering the latest complete accounting year together with all pertinent notes thereto and certification by a public accountant should be furnished.

II. APPLICANTS WHICH ARE NEWLY FORMED ENTITIES

A. Applications for construction permits

1. *Estimate of construction costs.* The information that will normally be required of applicants which are newly formed entities will not differ in scope from that required of established organizations. Accordingly, applicants should submit estimates as described above for established organizations.

2. *Source of construction funds.* The application should specifically identify the source or sources upon which the applicant relies for the funds necessary to pay the cost of contructing the facility, and the amount to be obtained from each. With respect to each source, the application should describe in detail the applicant's legal and financial relationships with its stockholders, corporate affiliates, or others (such as financial institutions) upon which the applicant is relying for financial assistance. If the sources of funds relied upon include parent companies or other corporate affiliates, information to support the financial capability of each such company or affiliate to meet its commitments to the applicant should be set forth in the application. This information should be of the same kind and scope as would be required if the parent companies or affiliates were in fact the applicant. Ordinarily, it will be necessary that copies of agreements or contracts among the companies be submitted.

As noted earlier in this appendix, an applicant which is a newly formed entity will normally not be in a position to submit the usual types of balance sheets and income statements reflecting the results of prior operations. The applicant should, however, include in its application a statement of its assets, liabilities, and capital structure as of the date of the application.

III. ANNUAL FINANCIAL STATEMENT

Each holder of a construction permit for a production or utilization facility of a type described in § 50.21(b) or § 50.22, or a testing facility is required by § 50.71(b) to file its annual financial report with the Commission at the time of issuance thereof. This requirement does not apply to licensees or holders of construction permits for medical and research reactors.

IV. ADDITIONAL INFORMATION

The Commission may, from time to time, request the applicant, whether an established organization or newly formed entity, to submit additional or more detailed information respecting its financial arrangements more detailed information respecting its financial arrangements and status of funds if such information is deemed necessary to enable the Commiasion to determine an applicant's financial qualifications for the license.

[49 FR 35753, Sept. 12, 19844, as amended at 50 FR 18853, May 3, 1985]

APPENDIX D—[Reserved]

APPENDIX E—EMERGENCY PLANNING AND PREPAREDNESS FOR PRODUCTION AND UTILIZATION FACILITIES

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I. Introduction
II. The Preliminary Safety Analysis Report
III. The Final Safety Analysis Report
IV. Content of Emergency Plans
V. Implementing Procedures

I. INTRODUCTION

Each applicant for a construction permit is required by § 50.34(a) to include in the preliminary safety analysis report a discussion of preliminary plans for coping with emergencies. Each applicant for an operating license is required by § 50.34(b) to include in the final safety analysis report plans for coping with emergencies.

This appendix establishes minimum requirements for emergency plans for use in attaining an acceptable state of emergency preparedness. These plans shall be described generally in the preliminary safety analysis report and submitted as part of the final safety analysis report.

The potential radiological hazards to the public associated with the operation of research and test reactors and fuel facilities licensed under 10 CFR Parts 50 and 70 involve considerations different than those associated with nuclear power reactors. Consequently, the size of Emergency Planning Zones[1] (EPZs) for facilities other than

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[1] EPZs for power reactors are discussed in NUREG-0396; EPA 520/1-78-016, "Planning Basis for the Development of State and Local Government Radiological Emergency

Continued

power reactors and the degree to which compliance with the requirements of this section and sections II, III, IV, and V as necessary will be determined on a case-by-case basis.[3]

Notwithstanding the above paragraphs, in the case of an operating license authorizing only fuel loading and/or low power operations up to 5% of rated power, no NRC or FEMA review, findings, or determinations concerning the state of offsite emergency preparedness or the adequacy of and the capability to implement State and local offsite emergency plans, as defined in this Appendix, are required prior to the issuance of such a license.

II. THE PRELIMINARY SAFETY ANALYSIS REPORT

The Preliminary Safety Analysis Report shall contain sufficient information to ensure the compatibility of proposed emergency plans for both onsite areas and the EPZs, with facility design features, site layout, and site location with respect to such considerations as access routes, surrounding population distributions, land use, and local jurisdictional boundaries for the EPZs in the case of nuclear power reactors as well as the means by which the standards of § 50.47(b) will be met.

As a minimum, the following items shall be described:

A. Onsite and offsite organizations for coping with emergencies and the means for notification, in the event of an emergency, of persons assigned to the emergency organizations.

B. Contacts and arrangements made and documented with local, State, and Federal governmental agencies with responsibility for coping with emergencies, including identification of the principal agencies.

C. Protective measures to be taken within the site boundary and within each EPZ to protect health and safety in the event of an accident; procedures by which these measures are to be carried out (e.g., in the case of an evacuation, who authorizes the evacuation, how the public is to be notified and instructed, how the evacuation is to be carried out); and the expected response of offsite agencies in the event of an emergency.

D. Features of the facility to be provided for onsite emergency first aid and decontamination and for emergency transportation of onsite individuals to offsite treatment facilities.

E. Provisions to be made for emergency treatment at offsite facilities of individuals injured as a result of licensed activities.

F. Provisions for a training program for employees of the licensee, including those who are assigned specific authority and responsibility in the event of an emergency, and for other persons who are not employees of the licensee but whose assistance may be needed in the event of a radiological emergency.

G. A preliminary analysis that projects the time and means to be employed in the notification of State and local governments and the public in the event of an emergency. A nuclear power plant applicant shall perform a preliminary analysis of the time required to evacuate various sectors and distances within the plume exposure pathway EPZ for transient and permanent populations, noting major impediments to the evacuation or taking of protective actions.

H. A preliminary analysis reflecting the need to include facilities, systems, and methods for identifying the degree of seriousness and potential scope of radiological consequences of emergency situations within and outside the site boundary, including capabilities for dose projection using real-time meteorological information and for dispatch of radiological monitoring teams within the EPZs; and a preliminary analysis reflecting the role of the onsite technical support center and of the nearsite emergency operations facility in assessing information, recommending protective action, and disseminating information to the public.

III. THE FINAL SAFETY ANALYSIS REPORT

The Final Safety Analysis Report shall contain the plans for coping with emergencies. The plans shall be an expression of the overall concept of operation; they shall describe the essential elements of advance planning that have been considered and the provisions that have been made to cope with emergency situations. The plans shall incorporate information about the emergency re-

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Response Plans in Support of Light Water Nuclear Power Plants," December 1978. The size of the EPZs for a nuclear power plant shall be determined in relation to local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries. The size of the EPZs also may be determined on a case-by-case basis for gas-cooled nuclear reactors and for reactors with an authorized power level less than 250 MW thermal. Generally, the plume exposure pathway EPZ for nuclear power plants with an authorized power level greater than 250 MW thermal shall consist of an area about 10 miles (16 km) in radius and the ingestion pathway EPZ shall consist of an area about 50 miles (80 km) in radius.

[3] Regulatory Guide 2.6 will be used as guidance for the acceptability of research and test reactor emergency response plans.

sponse roles of supporting organizations and offsite agencies. That information shall be sufficient to provide assurance of coordination among the supporting groups and with the licensee.

The plans submitted must include a description of the elements set out in Section IV for the Emergency Planning Zones (EPZs) to an extent sufficient to demonstrate that the plans provide reasonable assurance that adequate protective measures can and will be taken in the event of an emergency.

IV. CONTENT OF EMERGENCY PLANS

The applicant's emergency plans shall contain, but not necessarily be limited to, information needed to demonstrate compliance with the elements set forth below, i.e., organization for coping with radiation emergencies, assessment action, activation of emergency organization, notification procedures, emergency facilities and equipment, training, maintaining emergency preparedness, and recovery. In addition, the emergency response plans submitted by an applicant for a nuclear power reactor operating license shall contain information needed to demonstrate compliance with the standards described in § 50.47(b), and they will be evaluated against those standards. The nuclear power reactor operating license applicant shall also provide an analysis of the time required to evacuate and for taking other protective actions for various sectors and distances within the plume exposure pathway EPZ for transient and permanent populations.

A. Organization

The organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensee's emergency organization and the means for notification of such individuals in the event of an emergency. Specifically, the following shall be included:

1. A description of the normal plant operating organization.

2. A description of the onsite emergency response organization with a detailed discussion of:

a. Authorities, responsibilities, and duties of the individual(s) who will take charge during an emergency;

b. Plant staff emergency assignments;

c. Authorities, responsibilities, and duties on an onsite emergency coordinator who shall be in charge of the exchange of information with offsite authorities responsible for coordinating and implementing offsite emergency measures.

3. A description, by position and function to be performed, of the licensee's headquarters personnel who will be sent to the plant site to augment the onsite emergency organization.

4. Identification, by position and function to be performed, of persons within the licensee organization who will be responsible for making offsite dose projections, and a description of how these projections will be made and the results transmitted to State and local authorities, NRC, and other appropriate governmental entities.

5. Identification, by position and function to be performed, of other employees of the licensee with special qualifications for coping with emergency conditions that may arise. Other persons with special qualifications, such as consultants, who are not employees of the licensee and who may be called upon for assistance for emergencies shall also be identified. The special qualifications of these persons shall be described.

6. A description of the local offsite services to be provided in support of the licensee's emergency organization.

7. Identification of, and assistance expected from, appropriate State, local, and Federal agencies with responsibilities for coping with emergencies.

8. Identification of the State and/or local officials responsible for planning for, ordering, and controlling appropriate protective actions, including evacuations when necessary.

B. Assessment Actions

The means to be used for determining the magnitude of and for continually assessing the impact of the release of radioactive materials shall be described, including emergency action levels that are to be used as criteria for determining the need for notification and participation of local and State agencies, the Commission, and other Federal agencies, and the emergency action levels that are to be used for determining when and what type of protective measures should be considered within and outside the site boundary to protect health and safety. The emergency action levels shall be based on in-plant conditions and instrumentation in addition to onsite and offsite monitoring. These emergency action levels shall be discussed and agreed on by the applicant and State and local governmental authorities and approved by NRC. They shall also be reviewed with the State and local governmental authorities on an annual basis.

C. Activation of Emergency Organization

The entire spectrum of emergency conditions that involve the alerting or activating of progressively larger segments of the total emergency organization shall be described. The communication steps to be taken to alert or activate emergency personnel under each class of emergency shall be described.

nergency action levels (based not only on
asite and offsite radiation monitoring in-
rmation but also on readings from a
umber of sensors that indicate a potential
nergency, such as the pressure in contain-
ent and the response of the Emergency
ore Cooling System) for notification of off-
te agencies shall be described. The exist-
ce, but not the details, of a message au-
entication scheme shall be noted for such
gencies. The emergency classes defined
all include: (1) notification of unusual
ents, (2) alert, (3) site area emergency,
d (4) general emergency. These classes
e further discussed in NUREG-0654;
EMA-REP-1.

D. Notification Procedures

1. Administrative and physical means for
otifying local, State, and Federal officials
d agencies and agreements reached with
ese officials and agencies for the prompt
otification of the public and for public
acuation or other protective measures,
ould they become necessary, shall be de-
ribed. This description shall include iden-
fication of the appropriate officials, by
tle and agency, of the State and local gov-
nment agencies within the EPZs.[1]

2. Provisions shall be described for yearly
ssemination to the public within the
lume exposure pathway EPZ of basic emer-
ency planning information such as the
ethods and times required for public noti-
cation and the protective actions planned
an accident occurs, general information as
the nature and effects of radiation, and a
sting of local broadcast stations that will
e used for dissemination of information
uring an emergency. Signs or other meas-
res shall also be used to disseminate to any
ansient population within the plume expo-
re pathway EPZ appropriate information
at would be helpful if an accident occurs.

3. A licensee shall have the capability to
otify responsible State and local govern-
ental agencies within 15 minutes after de-
aring an emergency. The licensee shall
emonstrate that the State/local officials
ave the capability to make a public notifi-
ation decision promptly on being informed
y the licensee of an emergency condition.
y February 1, 1982, each nuclear power re-
ctor licensee shall demonstrate that ad-
inistrative and physical means have been
stablished for alerting and providing
rompt instructions to the public within the
lume exposure pathway EPZ. The four-
onth period in 10 CFR 50.54(s)(2) for the
orrection of emergency plan deficiencies
hall not apply to the initial installation of
his public notification system that is re-
uired by February 1, 1982. The four-month
eriod will apply to correction of deficiencies identified during the initial installation and testing of the prompt public notification systems as well as those deficiencies discovered thereafter. The design objective of the prompt public notification system shall be to have the capability to essentially complete the initial notification of the public within the plume exposure pathway EPZ within about 15 minutes. The use of this notification capability will range from immediate notification of the public (within 15 minutes of the time that State and local officials are notified that a situation exists requiring urgent action) to the more likely events where there is substantial time available for the State and local governmental officials to make a judgment whether or not to activate the public notification system. Where there is a decision to activate the notification system, the State and local officials will determine whether to activate the entire notification system simultaneously or in a graduated or staged manner. The responsibility for activating such a public notification system shall remain with the appropriate governmental authorities.

E. Emergency Facilities and Equipment

Adequate provisions shall be made and described for emergency facilities and equipment, including:

1. Equipment at the site for personnel monitoring;
2. Equipment for determining the magnitude of and for continuously assessing the impact of the release of radioactive materials to the environment;
3. Facilities and supplies at the site for decontamination of onsite individuals;
4. Facilities and medical supplies at the site for appropriate emergency first aid treatment;
5. Arrangements for the services of physicians and other medical personnel qualified to handle radiation emergencies on-site;
6. Arrangements for transportation of contaminated injured individuals from the site to specifically identified treatment facilities outside the site boundary;
7. Arrangements for treatment of individuals injured in support of licensed activities on the site at treatment facilities outside the site boundary;
8. A licensee onsite technical support center and a licensee near-site emergency operations facility from which effective direction can be given and effective control can be exercised during an emergency;
9. At least one onsite and one offsite communications system; each system shall have a backup power source.

All communication plans shall have arrangements for emergencies, including titles and alternates for those in charge at both ends of the communication links and the primary and backup means of communication. Where consistent with the function of the governmental agency, these arrangements will include:

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[1] See footnote 1 to section I.

a. Provision for communications with contiguous State/local governments within the plume exposure pathway EPZ. Such communications shall be tested monthly.

b. Provision for communications with Federal emergency response organizations. Such communications systems shall be tested annually.

c. Provision for communications among the nuclear power reactor control room, the onsite technical support center, and the near-site emergency operations facility; and among the nuclear facility, the principal State and local emergency operations centers, and the field assessment teams. Such communications systems shall be tested annually.

d. Provisions for communications by the licensee with NRC Headquarters and the appropriate NRC Regional Office Operations Center from the nuclear power reactor control room, the onsite technical support center, and the near-site emergency operations facility. Such communications shall be tested monthly.

F. Training.

The program to provide for (1) the training of employees and exercising, by periodic drills, of radiation emergency plans to ensure that employees of the licensee are familiar with their specific emergency response duties, and (2) the participation in the training and drills by other persons whose assistance may be needed in the event of a radiation emergency shall be described. This shall include a description of specialized initial training and periodic retraining programs to be provided to each of the following categories of emergency personnel:

a. Directors and/or coordinators of the plant emergency organization;

b. Personnel responsible for accident assessment, including control room shift personnel;

c. Radiological monitoring teams;

d. Fire control teams (fire brigades);

e. Repair and damage control teams;

f. First aid and rescue teams;

g. Medical support personnel;

h. Licensee's headquarters support personnel;

i. Security personnel.

In addition, a radiological orientation training program shall be made available to local services personnel; e.g., local emergency services/Civil Defense, local law enforcement personnel, local news media persons.

The plan shall describe provisions for the conduct of emergency preparedness exercises as follows: Exercises shall test the adequacy of timing and content of implementing procedures and methods, test emergency equipment and communications networks, test the public notification system, and ensure that emergency organization personnel are familiar with their duties.[3]

1. A full participation[4] exercise which tests as much of the licensee, State and local emergency plans as is reasonably achievable without mandatory public participation shall be conducted for each site at which a power reactor is located for which the first operating license for that site is issued after July 13, 1982. This exercise shall be conducted within two years before the issuance of the first operating license for full power (one authorizing operation above 5% of rated power) of the first reactor and shall include participation by each State and local government within the plume exposure pathway EPZ and each State within the ingestion exposure pathway EPZ. If the full participation exercise is conducted more than one year prior to issuance of an operating licensee for full power, an exercise which tests the licensee's onsite emergency plans shall be conducted within one year before issuance of an operating license for full power. This exercise need not have State or local government participation.

2. Each licensee at each site shall annually exercise its emergency plan.

3. Each licensee at each site shall exercise with offsite authorities such that the State and local government emergency plans for each operating reactor site are exercised biennially, with full or partial participation[5]

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[3] Use of site specific simulators or computers is acceptable for any exercise.

[4] "Full participation" when used in conjunction with emergency preparedness exercises for a particular site means appropriate offsite local and State authorities and licensee personnel physically and actively take part in testing their integrated capability to adequately assess and respond to an accident at a commercial nuclear power plant. "Full participation" includes testing the major observable portions of the onsite and offsite emergency plans and mobilization of State, local and licensee personnel and other resources in sufficient numbers to verifiy the capability to respond to the accident scenario.

[5] "Partial participation" when used in conjunction with emergency preparedness exercises for a particular site means appropriate offsite authorities shall actively take part in the exercise sufficient to test direction and control functions; i.e., (a) protective action decision making related to emergency action levels, and (b) communication capabilities among affected State and local authorities and the licensee.

y States and local governments, within the lume exposure pathway EPZ. State and ocal governments that have fully partici- ated in a joint exercise since October 1, 982, are eligible to fully participate in mergency preparedness exercises on a bien- ial frequency. The level of participation hall be as follows:

(a) A State shall at least partially partici- ate in each offsite exercise at each site.

(b) A State shall fully participate in at east one offsite exercise every 2 years.

(c) At least once every 7 years, all States vithin the plume exposure pathway EPZ or a given site must fully participate in an ffsite exercise for that site. This exercise must also involve full participation by local overnments within the plume exposure athway EPZ.

(d) Partial participation by a local govern- nent during an offsite exercise for a site is cceptable only when the local government s fully participating in a biennial exercise t another site.

(e) Each State within any ingestion expo- ure pathway EPZ shall exercise its plans and preparedness related to ingestion expo- ure pathway measures at least once every 5 years.

(f) Licensees shall enable any State or local government located within the plume exposure pathway EPZ to participate in annual exercises when requested by such State or local government.

4. Remedial exercises will be required if the emergency plan is not satisfactorily tested during the biennial exercise, such that NRC, in consultation with FEMA, cannot find reasonable assurance that adequate protective measures can be taken in the event to a radiological emergency. The extent of State and local participation in remedial exercises must be sufficient to show that appropriate corrective measures have been taken regarding the elements of the plan not properly tested in the previous exercises.

5. All training, including exercises, shall provide for formal critiques in order to identify weak or deficient areas that need correction. Any weaknesses or deficiencies that are identified shall be corrected.

6. The participation of state and local governments in an emergency exercise is not required to the extent that the applicant has identified those governments as refusing to participate further in emergency planning activities, pursuant to 10 CFR 50.47(c)(1). In such cases, an exercise shall be held with the applicant or licensee and such governmental entities as elect to participate in the emergency planning process.

G. Maintaining Emergency Preparedness

Provisions to be employed to ensure that the emergency plan, its implementing procedures, and emergency equipment and supplies are maintained up to date shall be described.

H. Recovery

Criteria to be used to determine when, following an accident, reentry of the facility would be appropriate or when operation could be resumed shall be described.

V. IMPLEMENTING PROCEDURES

No less than 180 days prior to the scheduled issuance of an operating license for a nuclear power reactor or a license to possess nuclear material the applicant's detailed implementing procedures for its emergency plan shall be submitted to the Commission as specified in § 50.4. Licensees who are authorized to operate a nuclear power facility shall submit any changes to the emergency plan or procedures to the Commission, as specified in § 50.4, within 30 days of such changes.

[45 FR 55410, Aug. 19, 1980; 46 FR 28839, May 29, 1981, as amended at 46 FR 63032, Dec. 30, 1981; 47 FR 30236, July 13, 1982; 47 FR 57671, Dec. 28, 1982; 49 FR 27736, July 6, 1984; 51 FR 40310, Nov. 6, 1986; 52 FR 16829, May 6, 1987; 52 FR 42086, Nov. 3, 1987]

APPENDIX F—POLICY RELATING TO THE SITING OF FUEL REPROCESSING PLANTS AND RELATED WASTE MANAGEMENT FACILITIES

1. Public health and safety considerations relating to licensed fuel reprocessing plants do not require that such facilities be located on land owned and controlled by the Federal Government. Such plants, including the facilities for the temporary storage of high-level radioactive wastes, may be located on privately owned property.

2. A fuel reprocessing plant's inventory of high-level liquid radioactive wastes will be limited to that produced in the prior 5 years. (For the purpose of this statement of policy, "high-level liquid radioactive wastes" means those aqueous wastes resulting from the operation of the first cycle solvent extraction system, or equivalent, and the concentrated wastes from subsequent extraction cycles, or equivalent, in a facility for reprocessing irradiated reactor fuels.) High-level liquid radioactive wastes shall be converted to a dry solid as required to comply with this inventory limitation, and placed in a sealed container prior to transfer to a Federal repository in a shipping cask meeting the requirements of 10 CFR Part 71. The dry solid shall be chemically, thermally, and radiolytically stable to the extent that the equilibrium pressure in the sealed container will not exceed the safe operating pressure

for that container during the period from canning through a minimum of 90 days after receipt (transfer of physical custody) at the Federal repository. All of these high-level radioactive wastes shall be transferred to a Federal repository no later than 10 years following separation of fission products from the irradiated fuel. Upon receipt, the Federal repository will assume permanent custody of these radioactive waste materials although industry will pay the Federal Government a charge which together with interest on unexpended balances will be designed to defray all costs of disposal and perpetual surveillance, the Department of Energy will take title to the radioactive waste material upon transfer to a Federal repository. Before retirement of the reprocessing plant from operational status and before termination of licensing pursuant to § 50.82, transfer of all such wastes to a Federal repository shall be completed. Federal repositories, which will be limited in number, will be designated later by the Commission.

3. Disposal of high-level radioactive fission product waste material will not be permitted on any land other than that owned and controlled by the Federal Government.

4. A design objective for fuel reprocessing plants shall be to facilitate decontamination and removal of all significant radioactive wastes at the time the facility is permanently decommissioned. Criteria for the extent of decontamination to be required upon decommissioning and license termination will be developed in consultation with competent groups. Opportunity will be afforded for public comment before such criteria are made effective.

5. Applicants proposing to operate fuel reprocessing plants, in submitting information concerning financial qualifications as required by § 50.33(f), shall include information enabling the Commission to determine whether the applicant is financially qualified, among other things, to provide for the removal and disposal of radioactive wastes, during operation and upon decommissioning of the facility, in accordance with the Commission's regulations, including the requirements set out in this appendix.

6. With respect to fuel reprocessing plants already licensed, the licenses will be appropriately conditioned to carry out the purposes of the policy stated above with respect to high-level radioactive fission product wastes generated after installation of new equipment for interim storage of liquid wastes or after installation of equipment required for solidification without interim liquid storage. In either case, such equipment shall be installed at the earliest practicable date, taking into account the time required for design, procurement and installation thereof. With respect to such plants, the application of the policy stated in this appendix to existing wastes and to wastes generated prior to the installation of such equipment, will be the subject of a further rule making proceeding.

[35 FR 17533, Nov. 14, 1970, as amended at 36 FR 5411, Mar. 23, 1971; 42 FR 20139, Apr. 18, 1977; 45 FR 14201, Mar. 5, 1980]

APPENDIX G—FRACTURE TOUGHNESS REQUIREMENTS

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I. Introduction and Scope
II. Definitions
III. Fracture Toughness Tests
IV. Fracture Toughness Requirements
V. Inservice Requirements—Reactor Vessel Beltline Materials

I. INTRODUCTION AND SCOPE

This appendix specifies fracture toughness requirements for ferritic materials of pressure-retaining components of the reactor coolant pressure boundary of light water nuclear power reactors to provide adequate margins of safety during any condition of normal operation, including anticipated operational occurrences and system hydrostatic tests, to which the pressure boundary may be subjected over its service lifetime.

The ASME Code forms the basis for the requirements of this appendix. "ASME Code" means the American Society of Mechanical Engineers Boiler and Pressure Vessel Code. If no section is specified, the reference is to Section III, Division 1, "Rules for Construction of Nuclear Power Plant Components." "Section XI" means Section XI, Division 1, "Rules for Inservice Inspection of Nuclear Power Plant Components." If no edition or addenda is specified the applicable ASME Code edition and addenda and any limitations and modifications thereof are specified in § 50.55a of this part.

The ASME Boiler and Pressure Vessel Code has been approved for incorporation by reference by the Director of the Federal Register. A notice of any changes made to the material incorporated by reference will be published in the FEDERAL REGISTER. Copies of the ASME Boiler and Pressure Vessel Code may be purchased from the American Society of Mechanical Engineers, United Engineering Center, 345 East 47th St., New York, NY 10017. It is also available for inspection at the Nuclear Regulatory Commission's Public Document Room, 2120 L Street, NW., Washington, D.C.

The requirements of this appendix apply to the following materials:

NOTE: The adequacy of the fracture toughness of other ferritic materials not covered in this section shall be demonstrated to the Director, Office of Nuclear Reactor Regulation, on an individual case basis.

A. Carbon and low-alloy ferritic steel plate, forgings, castings, and pipe with specified minimum yield strengths not over 50,000 psi (345 MPa), and to those with specified minimum yield strengths greater than 50,000 psi (345 MPa) but not over 90,000 psi (621 MPa) if qualified by using methods equivalent to those described in paragraph G-2110 of the ASME Code as defined in paragraph II.A. of this appendix. The latest edition and addenda permitted by paragraph 50.55a(b) of this part at the time the analysis is made is to be used for the purpose of this paragraph.

B. Welds and weld heat-affected zones in the materials specified in paragraph I.A. of this appendix.

C. Materials for bolting and other types of fasteners with specified minimum yield strengths not over 130,000 psi (896 MPa).

II. DEFINITIONS

A. "Ferritic material" means carbon and low-alloy steels, higher alloy steels including all stainless alloys of the 4xx series, and maraging and precipitation hardening steels with a predominantly body-centered cubic crystal structure.

B. "System hydrostatic tests" means all preoperational system leakage and hydrostatic pressure tests and all system leakage and hydrostatic pressure tests performed during the service life of the pressure boundary in compliance with the ASME Code, Section XI.

C. "Specified minimum yield strength" means the minimum yield strength (in the unirradiated condition) of a material specified in the construction code under which the component is built under § 50.55a of this part.

D. "Reference temperature" means the reference temperature, RT_{NDT}, as defined in the ASME Code.

E. "Adjusted reference temperature" means the reference temperature as adjusted for irradiation effects (see Section V of this appendix) by adding to RT_{NDT} the temperature shift, measured at the 30 ft-lb (41J) level, in the average Charpy curve for the irradiated material relative to that for the unirradiated material.

F. "Beltline" or "Beltline region of reactor vessel" means the region of the reactor vessel (shell material including welds, heat affected zones, and plates or forgings) that directly surrounds the effective height of the active core and adjacent regions of the reactor vessel that are predicted to experience sufficient neutron radiation damage to be considered in the selection of the most limiting material with regard to radiation damage.

III. FRACTURE TOUGHNESS TESTS

A. To demonstrate compliance with the fracture toughness requirements of Sections IV and V of this appendix, ferritic materials must be tested in accordance with the ASME Code and, for the beltline materials, the test requirements of Appendix H of this part. For a reactor vessel that was constructed to an ASME Code earlier than the Summer 1972 Addenda of the 1971 Edition (under § 50.55a of this part), the fracture toughness data and data analyses must be supplemented in a manner approved by the Director, Office of Nuclear Reactor Regulation, to demonstrate equivalence with the fracture toughness requirements of this appendix.

B. Test methods for supplemental fracture toughness tests described in paragraph V.C.2. of this appendix must be submitted to and approved by the Director, Office of Nuclear Reactor Regulation, prior to testing.

C. All fracture toughness test programs conducted in accordance with paragraphs A and B of this section must comply with ASME Code requirements for calibration of test equipment, qualification of test personnel, and retention of records of these functions and of the test data.

IV. FRACTURE TOUGHNESS REQUIREMENTS

A. The pressure-retaining components of the reactor coolant pressure boundary that are made of ferritic materials must meet the requirements of the ASME Code supplemented as follows for fracture toughness during system hydrostatic tests and any condition of normal operation, including anticipated operational occurrences:

1. Reactor vessel beltline materials must have Charpy upper-shelf energy [1] of no less than 75 ft-lb (102J) initially and must maintain upper-shelf energy throughout the life of the vessel of no less than 50 ft-lb (68J), unless it is demonstrated in a manner approved by the Director, Office of Nuclear Reactor Regulation, that lower values of upper-shelf energy will provide margins of safety against fracture equivalent to those required by Appendix G of the ASME Code. The latest edition and addenda of the ASME Code permitted by paragraph 50.55a(b) of this part at the time the analysis is made are to be used for the purposes of paragraphs IV.A.1 and IV.A.2 of this appendix.

2. When the core is not critical, pressure-temperature limits for the reactor vessel must be at least as conservative as those ob-

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[1] Defined in ASTM E 185-79 and -82 which are incorporated by reference in Appendix H.

tained by following the methods of analysis and the required margins of safety of Appendix G of the ASME Code supplemented by the requirements of Section V of this appendix. In addition, when pressure exceeds 20 percent of the preservice system hydrostatic test pressure, the temperature of the closure flange regions that are highly stressed by the bolt preload must exceed the reference temperature of the material in those regions by at least 120°F (67°C) for normal operation and by 90°F (50°C) for hydrostatic pressure tests and leak tests, unless a lower temperature can be justified by showing that the margins of safety for those regions when they are controlling are equivalent to those required for the beltline when it is controlling. The justification submitted for the pressure temperature limits must describe the methods of analysis used.

3. When the core is critical (other than for the purpose of low-level physics tests), the temperature of the reactor vessel must not be lower than 40°F (22°C) above the minimum permissible temperature of paragraph 2. of this section nor lower than the minimum permissible temperature for the inservice system hydrostatic pressure test. An exception may be made for boiling water reactor vessels when water level is within the normal range for power operation and the pressure is less than 20 percent of the preservice system hydrostatic test pressure. In this case the minimum permissible temperature is 60°F (33°C) above the reference temperature of the closure flange regions that are highly stressed by the bolt preload.

4. If there is no fuel in the reactor during system hydrostatic pressure tests or leak tests, the minimum permissible test temperature must be 60°F (33°C) above the adjusted reference temperature of the reactor vessel material in the region that is controlling (as specified in paragraph IV.A.2 of this appendix).

5. If there is fuel in the reactor during system hydrostatic pressure tests or leak tests, the requirements of paragraphs 2 or 3 of this section apply, depending on whether the core is critical during the test.

B. Reactor vessels for which the predicted value of upper-shelf energy at end of life is below 50 ft-lb or for which the predicted value of adjusted reference temperature at end of life exceeds 200°F (93°C) must be designed to permit a thermal annealing treatment at a sufficiently high temperature to recover material toughness properties of ferritic materials of the reactor vessel beltline.

V. INSERVICE REQUIREMENTS—REACTOR VESSEL BELTLINE MATERIAL

A. The effects of neutron radiation on the reference temperature and upper shelf energy of reactor vessel beltline materials, including welds, are to be predicted from the results of pertinent radiation effects studies in addition to the results of the surveillance program of Appendix H to this part.

B. Reactor vessels may continue to be operated only for that service period within which the requirements of Section IV of this appendix are satisfied using the predicted value of the adjusted reference temperature and the predicted value of the upper-shelf energy at the end of the service period to account for the effects of radiation on the fracture toughness of the beltline materials. These predictions are to be made for the radiation conditions at the critical location on the crack front of the assumed flaw.[2] The highest adjusted reference temperature and the lowest upper-shelf energy level of all the beltline materials must be used to verify that the fracture toughness requirements are satisfied.

C. In the event that the requirements of Section V.B. of this appendix cannot be satisfied, reactor vessels may continue to be operated provided all of the following requirements are satisfied:

1. A volumetric examination of 100 percent of the beltline materials that do not satisfy the requirements of Section V.B. of this appendix is made and any flaws characterized according to Section XI of the ASME Code and as otherwise specified by the Director, Office of Nuclear Reactor Regulation.

2. Additional evidence of the fracture toughness of the beltline materials after exposure to neutron irradiation is to be obtained from results of supplemental fracture toughness tests.

3. An analysis is performed that conservatively demonstrates, making appropriate allowances for all uncertainties, the existence of equivalent margins of safety for continued operation.

D. If the procedures of Section V.C. of this appendix do not indicate the existence of an equivalent safety margin, the reactor vessel beltline may, subject to the approval of the Director, Office of Nuclear Reactor Regulation, be given a thermal annealing treatment to recover the fracture toughness of the material. The degree of recovery is to be measured by testing additional specimens that have been withdrawn from the surveillance program capsules and that have been annealed under the same time-at-temperature conditions as those given the beltline material. The results, together with the re-

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[2] For example, in analyses that follow Appendix G of the ASME Code, the radiation conditions to be used are those predicted for the material one fourth of the way through the vessel wall, i.e., at the deepest point on the crack front of the postulated defect.

ults of other pertinent annealing-effects
tudies, are to provide the basis for estab-
ishing the adjusted reference temperature
nd upper-shelf energy after annealing. The
eactor vessel may continue to be operated
nly for that service period within which
he predicted fracture toughness of the
eltline region materials satisfies the re-
uirements of Section IV.A. of this appen-
ix using the values of adjusted reference
emperature and upper-shelf energy that in-
lude the effects of annealing and subse-
uent irradiation.

E. The proposed programs for satisfying
he requirements of sections V.C. and V.D.
f this appendix must be submitted, as spec-
ied in § 50.4, for review and approval on an
ndividual case basis at least three years
rior to the date when the predicted frac-
ure toughness levels will no longer satisfy
he requirements of section V.B. of this ap-
endix.

8 FR 24009, May 27, 1983, as amended at
1 FR 40310, Nov. 6, 1986; 53 FR 43420, Oct.
7, 1988]

PPENDIX H—REACTOR VESSEL MATERI- AL SURVEILLANCE PROGRAM RE- QUIREMENTS

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Introduction
. Surveillance Program Criteria
I. Report of Test Results

I. INTRODUCTION

The purpose of the material surveillance
ogram required by this appendix is to
onitor changes in the fracture toughness
operties of ferritic materials in the reac-
r vessel beltline region of light water nu-
ear power reactors resulting from expo-
re of these materials to neutron irradia-
on and the thermal environment. Under
e program, fracture toughness test data
e obtained from material specimens ex-
sed in surveillance capsules, which are
thdrawn periodically from the reactor
ssel. These data will be used as described
Sections IV and V of Appendix G to this
rt.

ASTM E 185-73, -79 and -82, "Standard
actice for Conducting Surveillance Tests
r Light-Water Cooled Nuclear Power Re-
tor Vessels," which are referenced in the
llowing paragraphs, have been approved
r incorporation by reference by the Direc-
r of the Federal Register. A notice of any
anges made to the material incorporated
reference will be published in the FEDER-
REGISTER. Copies of ASTM E 185-73, -79,
d -82, may be obtained from the Ameri-
n Society for Testing and Materials, 1916
ce St., Philadelphia, PA 19103. Copies will be available for inspection at the Commission's Public Document Room, 2120 L Street, NW., Washington, D.C.

II. SURVEILLANCE PROGRAM CRITERIA

A. No material surveillance program is required for reactor vessels for which it can be conservatively demonstrated by analytical methods applied to experimental data and tests performed on comparable vessels, making appropriate allowances for all uncertainties in the measurements, that the peak neutron fluence (E>1MEV) at the end of the design life of the vessel will not exceed 10^{17} n/cm^2

B. Reactor vessels that do not meet the conditions of paragraph II.A. of this Appendix must have their beltline materials monitored by this appendix.

1. That part of the surveillance program conducted prior to the first capsule withdrawal must meet the requirements of the edition of ASTM E 185 that is current on the issue date of the ASME Code to which the reactor vessel was purchased. Later editions of ASTM E 185 may be used, but including only those editions through 1982. For each capsule withdrawal after July 26, 1983, the test procedures and reporting requirements must meet the requirements of ASTM E 185-82 to the extent practical for the configuration of the specimens in the capsule. For each capsule withdrawal prior to July 26, 1983 either the 1973, the 1979, or the 1982 edition of ASTM E 185 may be used.

2. Surveillance specimen capsules must be located near the inside vessel wall in the beltline region so that the specimen irradiation history duplicates, to the extent practicable within the physical constraints of the system, the neutron spectrum, temperature history, and maximum neutron fluence experienced by the reactor vessel inner surface. If the capsule holders are attached to the vessel wall or to the vessel cladding, construction and inservice inspection of the attachments and attachment welds must be done according to the requirements for permanent structural attachments to reactor vessels given in Sections III and XI of the ASME Code. The design and location of the capsule holders shall permit insertion of replacement capsules. Accelerated irradiation capsules may be used in addition to the required number of surveillance capsules specified in ASTM E 185.

3. A proposed withdrawal schedule must be submitted with a technical justification as specified in § 50.4. The proposed schedule must be approved prior to implementation.

C. An integrated surveillance program may be considered for a set of reactors that have similar design and operating features. The representative materials chosen for surveillance from each reactor in the set may be irradiated in one or more of the reactors, but there must be an adequate dosimetry program for each reactor. No reduction in the requirements for number of materials to be irradiated, specimen types, or number of specimens per reactor is permitted, but the amount of testing may be reduced if the initial results agree with predictions. Integrated surveillance programs must be approved by the Director, Office of Nuclear Reactor Regulation, on a case-by-case basis. Criteria for approval include the following considerations:

1. The design and operating features of the reactors in the set must be sufficiently similar to permit accurate comparisons of the predicted amount of radiation damage as a function of total power output.

2. There must be adequate arrangement for data sharing between plants.

3. There must be a contingency plan to assure that the surveillance program for each reactor will not be jeopardized by operation at reduced power level or by an extended outage of another reactor from which data are expected.

4. There must be substantial advantages to be gained, such as reduced power outages or reduced personnel exposure to radiation, as a direct result of not requiring surveillance capsules in all reactors in the set.

III. Report of Test Results

A. Each capsule withdrawal and the test results must be the subject of a summary technical report to be submitted, as specified in § 50.4, within one year after capsule withdrawal unless an extension is granted by the Director, Office of Nuclear Reactor Regulation.

B. The report must include the data required by ASTM E 185, as specified in paragraph II.B.1 of this appendix, and the results of all fracture toughness tests conducted on the beltline materials in the irradiated and unirradiated conditions.

C. If a change in the Technical Specifications is required, either in the pressure-temperature limits or in the operating procedures required to meet the limits, the expected date for submittal of the revised Technical Specifications must be provided with the report.

[48 FR 24011, May 27, 1983, as amended at 51 FR 40311, Nov. 6, 1986; 53 FR 43420, Oct. 27, 1988]

Appendix I—Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion "As Low as Is Reasonably Achievable" for Radioactive Material in Light-Water-Cooled Nuclear Power Reactor Effluents

Section I. *Introduction.* Section 50.34a provides that an application for a permit to construct a nuclear power reactor shall include a description of the preliminary design of equipment to be installed to maintain control over radioactive materials in gaseous and liquid effluents produced during normal reactor operations, including expected operational occurrences. In the case of an application filed on or after January 2, 1971, the application must also identify the design objectives, and the means to be employed, for keeping levels of radioactive material in effluents to unrestricted areas as low as practicable.

Section 50.36a contains provisions designed to assure that releases of radioactive material from nuclear power reactors to unrestricted areas during normal reactor operations, including expected operational occurrences, are kept as low as practicable.

This appendix provides numerical guides for design objectives and limiting conditions for operation to assist applicants for, and holders of, licenses for light-water-cooled nuclear power reactors in meeting the requirements of §§ 50.34a and 50.36a that radioactive material in effluents released from these facilities to unrestricted areas be kept as low as is reasonably achievable. Design objectives and limiting conditions for operation conforming to the guidelines of this appendix shall be deemed a conclusive showing of compliance with the "as low as is reasonably achievable" requirements of 10 CFR 50.34a and 50.36a. Design objectives and limiting conditions for operation differing from the guidelines may also be used, subject to a case-by-case showing of a sufficient basis for the findings of "as low as is reasonably achievable" required by §§ 50.34a and 50.36a. The guides presented in this appendix are appropriate only for light-water-cooled nuclear power reactors and not for other types of nuclear facilities.

Sec. II. *Guides on design objectives for light-water-cooled nuclear power reactors licensed under 10 CFR Part 50.* The guides on design objectives set forth in this section may be used by an applicant for a permit to construct a light-water-cooled nuclear power reactor as guidance in meeting the requirements of § 50.34a(a). The applicant shall provide reasonable assurance that the following design objectives will be met.

A. The calculated annual total quantity of ll radioactive material above background[1] be released from each light-water-cooled uclear power reactor to unrestricted areas ill not result in an estimated annual dose r dose commitment from liquid effluents or any individual in an unrestricted area om all pathways of exposure in excess of 3 illirems to the total body or 10 millirems any organ.

B.1. The calculated annual total quantity all radioactive material above background be released from each light-water-cooled uclear power reactor to the atmosphere ill not result in an estimated annual air ose from gaseous effluents at any location ear ground level which could be occupied individuals in unrestricted areas in xcess of 10 millirads for gamma radiation 20 millirads for beta radiation.

2. Notwithstanding the guidance of para- aph B.1:

(a) The Commission may specify, as guid- nce on design objectives, a lower quantity radioactive material above background to e released to the atmosphere if it appears hat the use of the design objectives in aragraph B.1 is likely to result in an esti- ated annual external dose from gaseous ffluents to any individual in an unrestrict- d area in excess of 5 millirems to the total ody; and

(b) Design objectives based upon a higher uantity of radioactive material above back- round to be released to the atmosphere han the quantity specified in paragraph .1 will be deemed to meet the require- ents for keeping levels of radioactive ma- erial in gaseous effluents as low as is rea- nably achievable if the applicant provides easonable assurance that the proposed igher quantity will not result in an esti- ated annual external dose from gaseous ffluents to any individual in unrestricted reas in excess of 5 millirems to the total ody or 15 millirems to the skin.

C. The calculated annual total quantity of l radioactive iodine and radioactive mate- al in particulate form above background to e released from each light-water-cooled nu- ear power reactor in effluents to the at- osphere will not result in an estimated nnual dose or dose commitment from such dioactive iodine and radioactive material particulate form for any individual in an nrestricted area from all pathways of ex- osure in excess of 15 millirems to any rgan.

D. In addition to the provisions of paragraphs A, B, and C above, the applicant shall include in the radwaste system all items of reasonably demonstrated technology that, when added to the system sequentially and in order of diminishing cost-benefit return, can for a favorable cost-benefit ratio effect reductions in dose to the population reasonably expected to be within 50 miles of the reactor. As an interim measure and until establishment and adoption of better values (or other appropriate criteria), the values $1000 per total body man-rem and $1000 per man-thyroid-rem (or such lesser values as may be demonstrated to be suitable in a particular case) shall be used in this cost-benefit analysis. The requirements of this paragraph D need not be complied with by persons who have filed applications for construction permits which were docketed on or after January 2, 1971, and prior to June 4, 1976, if the radwaste systems and equipment described in the preliminary or final safety analysis report and amendments thereto satisfy the Guides on Design Objectives for Light-Water-Cooled Nuclear Power Reactors proposed in the Concluding Statement of Position of the Regulatory Staff in Docket-RM-50-2 dated February 20, 1974, pp. 25-30, reproduced in the Annex to this Appendix I.

SEC. III. *Implementation.* A.1. Conformity with the guides on design objectives of Section II shall be demonstrated by calculational procedures based upon models and data such that the actual exposure of an individual through appropriate pathways is unlikely to be substantially underestimated, all uncertainties being considered together. Account shall be taken of the cumulative effect of all sources and pathways within the plant contributing to the particular type of effluent being considered. For determination of design objectives in accordance with the guides of Section II, the estimations of exposure shall be made with respect to such potential land and water usage and food pathways as could actually exist during the term of plant operation: *Provided,* That, if the requirements of paragraph B of Section III are fulfilled, the applicant shall be deemed to have complied with the requirements of paragraph C of Section II with respect to radioactive iodine if estimations of exposure are made on the basis of such food pathways and individual receptors as actually exist at the time the plant is licensed.

2. The characteristics attributed to a hypothetical receptor for the purpose of estimating internal dose commitment shall take into account reasonable deviations of individual habits from the average. The applicant may take account of any real phenomenon or factors actually affecting the estimate of radiation exposure, including the characteristics of the plant, modes of dis-

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[1] Here and elsewhere in this appendix ackground means radioactive materials in e environment and in the effluents from ght-water-cooled power reactors not gener- ed in, or attributable to, the reactors of hich specific account is required in deter- ining design objectives.

charge of radioactive materials, physical processes tending to attenuate the quantity of radioactive material to which an individual would be exposed, and the effects of averaging exposures over times during which determining factors may fluctuate.

B. If the applicant determines design objectives with respect to radioactive iodine on the basis of existing conditions and if potential changes in land and water usage and food pathways could result in exposures in excess of the guideline values of paragraph C of Section II, the applicant shall provide reasonable assurance that a monitoring and surveillance program will be performed to determine:

1. The quantities of radioactive iodine actually released to the atmosphere and deposited relative to those estimated in the determination of design objectives;

2. Whether changes in land and water usage and food pathways which would result in individual exposures greater than originally estimated have occurred; and

3. The content of radioactive iodine and foods involved in the changes, if and when they occur.

SEC. IV. *Guides on technical specifications for limiting conditions for operation for light-water-cooled nuclear power reactors licensed under 10 CFR Part 50.* The guides on limiting conditions for operation for light-water-cooled nuclear power reactors set forth below may be used by an applicant for a license to operate a light-water-cooled nuclear power reactor as guidance in developing technical specifications under § 50.36a(a) to keep levels of radioactive materials in effluents to unrestricted areas as low as is reasonably achievable.

Section 50.36a(b) provides that licensees shall be guided by certain considerations in establishing and implementing operating procedures specified in technical specifications that take into account the need for operating flexibility and at the same time assure that the licensee will exert his best effort to keep levels of radioactive material in effluents as low as is reasonably achievable. The guidance set forth below provides additional and more specific guidance to licensees in this respect.

Through the use of the guides set forth in this Section it is expected that the annual releases of radioactive material in effluents from light-water-cooled nuclear power reactors can generally be maintained within the levels set forth as numerical guides for design objectives in Section II.

At the same time, the licensee is permitted the flexibility of operation, compatible with considerations of health and safety, to assure that the public is provided a dependable source of power even under unusual operating conditions which may temporarily result in releases higher than such numerical guides for design objectives but still within levels that assure that the average population exposure is equivalent to small fractions of doses from natural background radiation. It is expected that in using this operational flexibility under unusual operating conditions, the licensee will exert his best efforts to keep levels of radioactive material in effluents within the numerical guides for design objectives.

A. If the quantity of radioactive material actually released in effluents to unrestricted areas from a light-water-cooled nuclear power reactor during any calendar quarter is such that the resulting radiation exposure, calculated on the same basis as the respective design objective exposure, would exceed one-half the design objective annual exposure derived pursuant to Sections II and III, the licensee shall: [2]

1. Make an investigation to identify the causes for such release rates;

2. Define and initiate a program of corrective action; and

3. Report these actions as specified in § 50.4, within 30 days from the end of the quarter during which the release occurred.

B. The licensee shall establish an appropriate surveillance and monitoring program to:

1. Provide data on quantities of radioactive material released in liquid and gaseous effluents to assure that the provisions of paragraph A of this section are met;

2. Provide data on measurable levels of radiation and radioactive materials in the environment to evaluate the relationship between quantities of radioactive material released in effluents and resultant radiation doses to individuals from principal pathways of exposure; and

3. Identify changes in the use of unrestricted areas (e.g., for agricultural purposes) to permit modifications in monitoring programs for evaluating doses to individuals from principal pathways of exposure.

C. If the data developed in the surveillance and monitoring program described in paragraph B of this section and in paragraph B of Section III or from other monitoring programs show that the relationship between the quantities of radioactive material released in liquid and gaseous effluents and the dose to individuals in unrestricted reas is significantly different from that as- umed in the calculations used to determine esign objectives pursuant to Sections II nd III, the Commission may modify the uantities in the technical specifications de- ning the limiting conditions for operation a license authorizing operation of a light- ater-cooled nuclear power reactor.

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[2] Section 50.36a(a)(2) requires the licensee to submit certain reports to the Commission with regard to the quantities of the principal radionuclides released to unrestricted areas. It also provides that, on the basis of such reports and any additional information the Commission may obtain from the licensee and others, the Commission may from time to time require the license to take such action as the Commission deems appropriate.

SEC. V. *Effective dates.* A. The guides for miting conditions for operation set forth in his appendix shall be applicable in any case which an application was filed on or after anuary 2, 1971, for a permit to construct a ght-water-cooled nuclear power reactor.

B. For each light-water-cooled nuclear ower reactor constructed pursuant to a ermit for which application was filed prior o January 2, 1971, the holder of the permit r a license, authorizing operation of the re- ctor shall, within a period of twelve onths from June 4, 1975, file with the ommission:

1. Such information as is necessary to valuate the means employed for keeping evels of radioactivity in effluents to unre- tricted areas as low as is reasonably achiev- ble, including all such information as is re- uired by § 50.34a (b) and (c) not already ontained in his application; and

2. Plans and proposed technical specifica- ions developed for the purpose of keeping eleases of radioactive materials to unre- tricted areas during normal reactor oper- tions, including expected operational oc- urrences, as low as is reasonably achieva- le.

CONCLUDING STATEMENT OF POSITION OF THE REGULATORY STAFF (DOCKET-RM-50-2)

GUIDES ON DESIGN OBJECTIVES FOR LIGHT-WATER-COOLED NUCLEAR POWER REACTORS

A. For radioactive material above back- round[1] in liquid effluents to be released to nrestricted areas:

1. The calculated annual total quantity of ll radioactive material from all light-water- ooled nuclear power reactors at a site hould not result in an annual dose or dose ommitment to the total body or to any rgan of an individual in an unrestricted rea from all pathways of exposure in xcess of 5 millirems; and

2. The calculated annual total quantity of adioactive material, except tritium and dis- olved gases, should not exceed 5 curies for ach light-water-cooled reactor at a site.

3. Notwithstanding the guidance in para- raph A.2, for a particular site, if an appli- ant for a permit to construct a light-water- ooled nuclear power reactor has proposed baseline in-plant control measures[2] to reduce the possible sources of radioactive material in liquid effluent releases and the calculated quantity exceeds the quantity set forth in paragraph A.2, the requirements for design objectives for radioactive material in liquid effluents may be deemed to have been met provided:

a. The applicant submits, as specified in § 50.4, an evaluation of the potential for effects from long-term buildup on the environment in the vicinity of the site of radioactive material, with a radioactive half-life greater than one year, to be released; and

b. The provisions of paragraph A.1 are met.

B. For radioactive material above background in gaseous effluents the annual total quantity of radioactive material to be released to the atmosphere by all light-water-cooled nuclear power reactors at a site:

1. The calculated annual air dose due to gamma radiation at any location near ground level which could be occupied by individuals at or beyond the boundary of the site should not exceed 10 millirads; and

2. The calculated annual air dose due to beta radiation at any location near ground level which could be occupied by individuals at or beyond the boundary of the site should not exceed 20 millirads.

3. Notwithstanding the guidance in paragraphs B.1 and B.2, for a particular site:

a. The Commission may specify, as guidance on design objectives, a lower quantity of radioactive material above background in gaseous effluents to be released to the atmosphere if it appears that the use of the design objectives described in paragraphs B.1 and B.2 is likely to result in an annual dose to an individual in an unrestricted area in excess of 5 millirems to the total body or 15 millirems to the skin; or

b. Design objectives based on a higher quantity of radioactive material above background in gaseous effluents to be released to the atmosphere than the quantity specified in paragraphs B.1 and B.2 may be deemed to meet the requirements for keeping levels of radioactive material in gaseous effluents as low as practicable if the applicant provides reasonable assurance that the proposed higher quantity will not result in annual doses to an individual in an unrestricted area in excess of 5 millirems to the total body or 15 millirems to the skin.

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[1] "Background," means the quantity of ra- dioactive material in the effluent from ight-water-cooled nuclear power reactors at a site that did not originate in the reactors.

[2] Such measures may include treatment of clear liquid waste streams (normally tritiated, nonaerated, low conductivity equipment drains and pump seal leakoff), dirty liquid waste streams (normally nontritiated, aerated, high conductivity building sumps, floor and sample station drains), steam generator blowdown streams, chemical waste streams, low purity and high purity liquid streams (resin regenerate and laboratory wastes), as appropriate for the type of reactor.

C. For radioactive iodine and radioactive material in particulate form above background released to the atmosphere:

1. The calculated annual total quantity of all radioactive iodine and radioactive material in particulate form from all light-water-cooled nuclear power reactors at a site should not result in an annual dose or dose commitment to any organ of an individual in an unrestricted area from all pathways of exposure in excess of 15 millirems. In determining the dose or dose commitment the portion thereof due to intake of radioactive material via the food pathways may be evaluated at the locations where the food pathways actually exist; and

2. The calculated annual total quantity of iodine-131 in gaseous effluents should not exceed 1 curie for each light-water-cooled nuclear power reactor at a site.

3. Notwithstanding the guidance in paragraphs C.1 and C.2 for a particular site, if an applicant for a permit to construct a light-water-cooled nuclear power reactor has proposed baseline in-plant control measures [3] to reduce the possible sources of radioactive iodine releases, and the calculated annual quantities taking into account such control measures exceed the design objective quantities set forth in paragraphs C.1 and C.2, the requirements for design objectives for radioactive iodine and radioactive material in particulate form in gaseous effluents may be deemed to have been met provided the calculated annual total quantity of all radioactive iodine and radioactive material in particulate form that may be released in gaseous effluents does not exceed four times the quantity calculated pursuant to paragraph C.1.

[40 FR 19442, May 5, 1975, as amended at 40 FR 40818, Sept. 4, 1975; 40 FR 58847, Dec. 19, 1975; 41 FR 16447, Apr. 19, 1976; 42 FR 20139, Apr. 18, 1977; 51 FR 40311, Nov. 6, 1986]

APPENDIX J—PRIMARY REACTOR CONTAINMENT LEAKAGE TESTING FOR WATER-COOLED POWER REACTORS

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I. INTRODUCTION

One of the conditions of all operating licenses for water-cooled power reactors as specified in § 50.54(o) is that primary reactor containments shall meet the containment leakage test requirements set forth in this appendix. These test requirements provide for preoperational and periodic verification by tests of the leak-tight integrity of the primary reactor containment, and systems and components which penetrate containment of water-cooled power reactors, and establish the acceptance criteria for such tests. The purposes of the tests are to assure that (a) leakage through the primary reactor containment and systems and components penetrating primary containment shall not exceed allowable leakage rate values as specified in the technical specifications or associated bases and (b) periodic surveillance of reactor containment penetrations and isolation valves is performed so that proper maintenance and repairs are made during the service life of the containment, and systems and components penetrating primary containment. These test requirements may also be used for guidance in establishing appropriate containment leakage test requirements in technical specifications or associated bases for other types of nuclear power reactors.

II. EXPLANATION OF TERMS

A. "Primary reactor containment" means the structure or vessel that encloses the components of the reactor coolant pressure boundary, as defined in § 50.2(v), and serves as an essentially leak-tight barrier against the uncontrolled release of radioactivity to the environment.

B. "Containment isolation valve" means any valve which is relied upon to perform a containment isolation function.

C. "Reactor containment leakage test program" includes the performance of Type A,

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[3] Such in-plant control measures may include treatment of steam generator blowdown tank exhaust, clean steam supplies for turbine gland seals, condenser vacuum systems, containment purging exhaust and ventilation exhaust systems and special design features to reduce contaminated steam and liquid leakage from valves and other sources such as sumps and tanks, as appropriate for the type of reactor.

Type B, and Type C tests, described in II.F, II.G, and II.H, respectively.

D. "Leakage rate" for test purposes is that leakage which occurs in a unit of time, stated as a percentage of weight of the original content of containment air at the leakage rate test pressure that escapes to the outside atmosphere during a 24-hour test period.

E. "Overall integrated leakage rate" means that leakage rate which obtains from a summation of leakage through all potential leakage paths including containment welds, valves, fittings, and components which penetrate containment.

F. "Type A Tests" means tests intended to measure the primary reactor containment overall integrated leakage rate (1) after the containment has been completed and is ready for operation, and (2) at periodic intervals thereafter.

G. "Type B Tests" means tests intended to detect local leaks and to measure leakage across each pressure-containing or leakage-limiting boundary for the following primary reactor containment penetrations:

1. Containment penetrations whose design incorporates resilient seals, gaskets, or sealant componds, piping penetrations fitted with expansion bellows, and electrical penetrations fitted with flexible metal seal assemblies.

2. Air lock door seals, including door operating mechanism penetrations which are part of the containment pressure boundary.

3. Doors with resilient seals or gaskets except for seal-welded doors.

4. Components other than those listed in II.G.1, II.G.2, or II.G.3 which must meet the acceptance criteria in III.B.3.

H. "Type C Tests" means tests intended to measure containment isolation valve leakage rates. The containment isolation valves included are those that:

1. Provide a direct connection between the inside and outside atmospheres of the primary reactor containment under normal operation, such as purge and ventilation, vacuum relief, and instrument valves;

2. Are required to close automatically upon receipt of a containment isolation signal in response to controls intended to effect containment isolation;

3. Are required to operate intermittently under postaccident conditions; and

4. Are in main steam and feedwater piping and other systems which penetrate containment of direct-cycle boiling water power reactors.

I. Pa (p.s.i.g.) means the calculated peak containment internal pressure related to the design basis accident and specified either in the technical specification or associated bases.

J. Pt (p.s.i.g.) means the containment vessel reduced test pressure selected to measure the integrated leakage rate during periodic Type A tests.

K. La (percent/24 hours) means the maximum allowable leakage rate at pressure Pa as specified for preoperational tests in the technical specifications or associated bases, and as specified for periodic tests in the operating license.

L. Ld (percent/24 hours) means the design leakage rate at pressure, Pa, as specified in the technical specifications or associated bases.

M. Lt (percent/24 hours) means the maximum allowable leakage rate at pressure Pt derived from the preoperational test data as specified in III.A.4.(a)(iii).

N. Lam, Ltm (percent/24 hours) means the total measured containment leakage rates at pressure Pa and Pt, respectively, obtained from testing the containment with components and systems in the state as close as practical to that which would exist under design basis accident conditions (e.g., vented, drained, flooded or pressurized).

O. "Acceptance criteria" means the standard against which test results are to be compared for establishing the functional acceptability of the containment as a leakage limiting boundary.

III. LEAKAGE TESTING REQUIREMENTS

A program consisting of a schedule for conducting Type A, B, and C tests shall be developed for leak testing the primary reactor containment and related systems and components penetrating primary containment pressure boundary.

Upon completion of construction of the primary reactor containment, including installation of all portions of mechanical, fluid, electrical, and instrumentation systems penetrating the primary reactor containment pressure boundary, and prior to any reactor operating period, preoperational and periodic leakage rate tests, as applicable, shall be conducted in accordance with the following:

A. *Type A test*—1. *Pretest requirements.* (a) Containment inspection in accordance with V.A. shall be performed as a prerequisite to the performance of Type A tests. During the period between the initiation of the containment inspection and the performance of the Type A test, no repairs or adjustments shall be made so that the containment can be tested in as close to the "as is" condition as practical. During the period between the completion of one Type A test and the initiation of the containment inspection for the subsequent Type A test, repairs or adjustments shall be made to components whose leakage exceeds that specified in the technical specification as soon as practical after identification. If during a Type A test, including the supplemental test specified in III.A.3.(b), potentially excessive leakage paths are identified which will interfere with satisfactory completion of the test, or which result in the Type A test not meeting the acceptance criteria III.A.4.(b) or III.A.5.(b), the Type A test shall be terminated and the leakage through such paths shall be measured using local leakage testing methods. Repairs and/or adjustments to equipment shall be made and a Type A test performed. The corrective action taken and the change in leakage rate determined from the tests and overall integrated leakage determined from the local leak and Type A tests shall be included in the report submitted to the Commission as specified in V.B.

(b) Closure of containment isolation valves for the Type A test shall be accomplished by normal operation and without any preliminary exercising or adjustments (e.g., no tightening of valve after closure by valve motor). Repairs of maloperating or leaking valves shall be made as necessary. Information on any valve closure malfunction or valve leakage that requires corrective action before the test, shall be included in the report submitted to the Commission as specified in V.B.

(c) The containment test conditions shall stabilize for a period of about 4 hours prior to the start of a leakage rate test.

(d) Those portions of the fluid systems that are part of the reactor coolant pressure boundary and are open directly to the containment atmosphere under post-accident conditions and become an extension of the boundary of the containment shall be opened or vented to the containment atmosphere prior to and during the test. Portions of closed systems inside containment that penetrate containment and rupture as a result of a loss of coolant accident shall be vented to the containment atmosphere. All vented systems shall be drained of water or other fluids to the extent necessary to assure exposure of the system containment isolation valves to containment air test pressure and to assure they will be subjected to the post-accident differential pressure. Systems that are required to maintain the plant in a safe condition during the test shall be operable in their normal mode, and need not be vented. Systems that are normally filled with water and operating under post-accident conditions, such as the containment heat removal system, need not be vented. However, the containment isolation valves in the systems defined in III.A.1.(d) shall be tested in accordance with III.C. The measured leakage rate from these tests shall be reported to the Commission.

2. *Conduct of tests.* Preoperational leakage rate tests at either reduced or at peak pressure, shall be conducted at the intervals specified in III.D.

3. *Test Methods.* (a) All Type A tests shall be conducted in accordance with the provisions of the American National Standard N45.4-1972, "Leakage Rate Testing of Containment Structures for Nuclear Reactors", March 16, 1972. In addition to the Total time and Point-to-Point methods described in that standard, the Mass Point Method, when used with a test duration of at least 24 hours, is an acceptable method to use to calculate leakage rates. A typical description of the Mass Point method can be found in the American National Standard ANSI/ANS 56.8-1987, "Containment System Leakage Testing Requirements", January 20, 1987.[1]

(b) The accuracy of any Type A test shall be verified by a supplemental test. An acceptable method is described in Appendix C of ANSI N45.4-1972. The supplemental test method selected shall be conducted for sufficient duration to establish accurately the change in leakage rate between the Type A and supplemental test. Results from this supplemental test are acceptable provided the difference between the supplemental test data and the Type A test data is within 0.25 La (or 0.25 Lt). If results are not within 0.25 La (or 0.25 Lt), the reason shall be determined, corrective action taken, and a successful supplemental test performed.

(c) Test leakage rates shall be calculated using absolute values corrected for instrument error.

4. *Preoperational leakage rate tests.* (a) *Test pressure*—(1) *Reduced pressure tests.* (i) An initial test shall be performed at a pressure Pt, not less than 0.50 Pa to measure a leakage rate Ltm.

(ii) A second test shall be performed at pressure Pa to measure a leakage rate Lam.

(iii) The leakage characteristics yielded by measurements Ltm and Lam shall establish the maximum allowable test leakage rate Lt of not more than La (Ltm/Lam). In the event Ltm/Lam is greater than 0.7, Lt shall be specified as equal to La (Pt/Pa). [1, 2]

(2) *Peak pressure tests.* A test shall be performed at pressure Pa to measure the leakage rate Lam.

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[1] ANSI N45.4-1972, "Leakage Rate Testing of Containment Structures for Nuclear Reactors" (dated March 16, 1972). Incorporation of ANSI N45.4-1972 by reference was approved by the Director of the Federal Register on October 30, 1972. Copies of this standard, as well as ANSI/ANS-56.8-1987, "Containment System Leakage Testing Requirements" (dated January 20, 1987) may be obtained from the American Nuclear Society, 555 North Kensington Avenue, La Grange Park, IL 60525. A copy of each of these standards is available for inspection at the Commission's Public Document Room at 2120 L Street NW., Washington, DC.

[2] Such inservice inspections are required by § 50.55a.

(b) *Acceptance criteria*—(1) *Reduced pressure tests.* The leakage rate Ltm shall be less than 0.75 Lt.

(2) *Peak pressure tests.* The leakage rate Lam shall be less than 0.75 La and not greater than Ld.

5. *Periodic leakage rate tests*—(a) *Test pressure.* (1) Reduced pressure tests shall be conducted at Pt;

(2) Peak pressure tests shall be conducted at Pa.

(b) *Acceptance criteria*—(1) *Reduced pressure tests.* The leakage rate Ltm shall be less than 0.75 Lt. If local leakage measurements are taken to effect repairs in order to meet the acceptance criteria, these measurements shall be taken at a test pressure Pt.

(2) *Peak pressure tests.* The leakage rate Lam shall be less than 0.75 La. If local leakage measurements are taken to effect repairs in order to meet the acceptance criteria, these measurements shall be taken at a test pressure Pa.

6. *Additional requirements.* (a) If any periodic Type A test fails to meet the applicable acceptance criteria in III.A.5.(b), the test schedule applicable to subsequent Type A tests will be reviewed and approved by the Commission.

(b) If two consecutive periodic Type A tests fail to meet the applicable acceptance criteria in III.A.5(b), notwithstanding the periodic retest schedule of III.D., a Type A test shall be performed at each plant shutdown for refueling or approximately every 18 months, whichever occurs first, until two consecutive Type A tests meet the acceptance criteria in III.A.5(b), after which time the retest schedule specified in III.D. may be resumed.

B. *Type B tests*—1. *Test methods.* Acceptable means of performing preoperation and periodic Type B tests include:

(a) Examination by halide leak-detection method (or by other equivalent test methods such as mass spectrometer) of a test chamber, pressurized with air, nitrogen, or pneumatic fluid specified in the technical specifications or associated bases and constructed as part of individual containment penetrations.

(b) Measurement of the rate of pressure loss of the test chamber of the containment penetration pressurized with air, nitrogen, or pneumatic fluid specified in the technical specifications or associated bases.

(c) Leakage surveillance by means of a permanently installed system with provisions for continuous or intermittent pressurization of individual or groups of containment penetrations and measurement of rate of pressure loss of air, nitrogen, or pneumatic fluid specified in the technical specification or associated bases through the leak paths.

2. *Test pressure.* All preoperational and periodic Type B tests shall be performed by local pneumatic pressurization of the containment penetrations, either individually or in groups, at a pressure not less than Pa.

3. *Acceptance criteria.* (See also Type C tests.) (a) The combined leakage rate of all penetrations and valves subject to Type B and C tests shall be less than 0.60 La, with the exception of the valves specified in III.C.3.

(b) Leakage measurements obtained through component leakage surveillance systems (e.g., continuous pressurization of individual containment components) that maintains a pressure not less than Pa at individual test chambers of containment penetrations during normal reactor operation, are acceptable in lieu of Type B tests.

C. *Type C tests*—1. *Test method.* Type C tests shall be performed by local pressurization. The pressure shall be applied in the same direction as that when the value would be required to perform its safety function, unless it can be determined that the results from the tests for a pressure applied in a different direction will provide equivalent or more conservative results. The test methods in III.B.1 may be substituted where appropriate. Each valve to be tested shall be closed by normal operation and without any preliminary exercising or adjustments (e.g., no tightening of valve after closure by valve motor).

2. *Test pressure.* (a) Valves, unless pressurized with fluid (e.g., water, nitrogen) from a seal system, shall be pressurized with air or nitrogen at a pressure of Pa.

(b) Valves, which are sealed with fluid from a seal system shall be pressurized with that fluid to a pressure not less than 1.10 Pa.

3. *Acceptance criterion.* The combined leakage rate for all penetrations and valves subject to Type B and C tests shall be less than 0.60 La. Leakage from containment isolation valves that are sealed with fluid from a seal system may be excluded when determining the combined leakage rate: *Provided,* That;

(a) Such valves have been demonstrated to have fluid leakage rates that do not exceed those specified in the technical specifications or associated bases, and

(b) The installed isolation valve seal-water system fluid inventory is sufficient to assure the sealing function for at least 30 days at a pressure of 1.10 Pa.

D. *Periodic retest schedule*—1. *Type A test.* (a) After the preoperational leakage rate tests, a set of three Type A tests shall be performed, at approximately equal intervals during each 10-year service period. The third test of each set shall be conducted when the plant is shutdown for the 10-year plant inservice inspections.[2]

(b) Permissible periods for testing. The performance of Type A tests shall be limited to periods when the plant facility is nonoperational and secured in the shutdown condition under the administrative control and in accordance with the safety procedures defined in the license.

2. *Type B tests.* (a) Type B tests, except tests for air locks, shall be performed during reactor shutdown for refueling, or other convenient intervals, but in no case at intervals greater than 2 years. If opened following a Type A or B test, containment penetrations subject to Type B testing shall be Type B tested prior to returning the reactor to an operating mode requiring containment integrity. For primary reactor containment penetrations employing a continuous leakage monitoring system, Type B tests, except for tests of air locks, may, notwithstanding the test schedule specified under III.D.1., be performed every other reactor shutdown for refueling but in no case at intervals greater than 3 years.

(b)(i) Air locks shall be tested prior to initial fuel loading and at 6-month intervals thereafter at an internal pressure not less than P_a.

(ii) Air locks opened during periods when containment integrity is not required by the plant's Technical Specifications shall be tested at the end of such periods at not less than P_a.

(iii) Air locks opened during periods when containment integrity is required by the plant's Technical Specifications shall be tested within 3 days after being opened. For air lock doors opened more frequently than once every 3 days, the air lock shall be tested at least once every 3 days during the period of frequent openings. For air lock doors having testable seals, testing the seals fulfills the 3-day test requirements. In the event that the testing for this 3-day interval cannot be at P_a, the test pressure shall be as stated in the Technical Specifications. Air lock door seal testing shall not be substituted for the 6-month test of the entire air lock at not less than P_a.

(iv) The acceptance criteria for air lock testing shall be stated in the Technical Specifications.

3. *Type C tests.* Type C tests shall be performed during each reactor shutdown for refueling but in no case at intervals greater than 2 years.

IV. SPECIAL TESTING REQUIREMENTS

A. *Containment modification.* Any major modification, replacement of a component which is part of the primary reactor con-
tainment boundary, or resealing a s
welded door, performed after the preope
tional leakage rate test shall be followed
either a Type A, Type B, or Type C test
applicable for the area affected by
modification. The measured leakage fr
this test shall be included in the report
the Commission, required by V.A. The
ceptance criteria of III.A.5.(b), III.B.3.,
III.C.3., as appropriate, shall be met. Mi
modifications, replacements, or resealing
seal-welded doors, performed directly pr
to the conduct of a scheduled Type A t
do not require a separate test.

B. *Multiple leakage barrier or subatm
pheric containments.* The primary reac
containment barrier of a multiple barrier
subatmospheric containment shall be s
jected to Type A tests to verify that its le
age rate meets the requirements of this
pendix. Other structures of multiple barr
or subatmospheric containments (e.g., s
ondary containments for boiling water re
tors and shield buildings for pressuri
water reactors that enclose the entire p
mary reactor containment or portions the
of) shall be subject to individual tests in
cordance with the procedures specified
the technical specifications, or associat
bases.

V. INSPECTION AND REPORTING OF TESTS

A. *Containment inspection.* A general i
spection of the accessible interior and ext
rior surfaces of the containment structur
and components shall be performed prior
any Type A test to uncover any evidence
structural deterioration which may affe
either the containment structural integri
or leak-tightness. If there is evidence
structural deterioration, Type A tests sha
not be performed until corrective action
taken in accordance with repair procedure
nondestructive examinations, and tests
specified in the applicable code specified
§ 50.55a at the commencement of repa
work. Such structural deterioration and co
rective actions taken shall be reported
part of the test report, submitted in accor
ance with V.B.

B. *Report of test results.* 1. The preopera
tional and periodic tests must be the subje
of a summary technical report submitted
the Commission, as specified in § 50.4, ap
proximately three months after the conduc
of each test. The report must be titled "Re
actor Containment Building Integrate
Leak Rate Test."

2. The report on the preoperational tes
shall include a schematic arrangement o
the leakage rate measurement system, th
instrumentation used, the supplemental tes
method, and the test program selected a
applicable to the preoperational test, and al
subsequent periodic tests. The report shal
contain an analysis and interpretation o

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[2] Such inservice inspections are required by § 50.55a.

the leakage rate test data for the Type A test results to the extent necessary to demonstrate the acceptability of the containment's leakage rate in meeting the acceptance criteria.

3. For each periodic test, leakage test results from Type A, B, and C tests shall be reported. The report shall contain an analysis and interpretation of the Type A test results and a summary analysis of periodic Type B and Type C tests that were performed since the last Type A test. Leakage test results from Type A, B, and C tests that failed to meet the acceptance criteria of III.A.5(b), III.B.3, and III.C.3, respectively, shall be reported in a separate accompanying summary report that includes an analysis and interpretation of the test data, the least-squares fit analysis of the test data, the instrumentation error analysis, and the structural conditions of the containment or components, if any, which contributed to the failure in meeting the acceptance criteria. Results and analyses of the supplemental verification test employed to demonstrate the validity of the leakage rate test measurements shall also be included.

[38 FR 4386, Feb. 14, 1973; 38 FR 5997, Mar. 6, 1973, as amended at 41 FR 16447, Apr. 19, 1976; 45 FR 62789, Sept. 22, 1980; 51 FR 40311, Nov. 6, 1986; 53 FR 45891, Nov. 15, 1988]

APPENDIX K—ECCS EVALUATION MODELS

I. Required and Acceptable Features of Evaluation Models.
II. Required Documentation.

I. REQUIRED AND ACCEPTABLE FEATURES OF THE EVALUATION MODELS

A. Sources of heat during the LOCA.

For the heat sources listed in paragraphs 1 to 4 below it shall be assumed that the reactor has been operating continuously at a power level at least 1.02 times the licensed power level (to allow for such uncertainties as instrumentation error), with the maximum peaking factor allowed by the technical specifications. A range of power distribution shapes and peaking factors representing power distributions that may occur over the core lifetime shall be studied and the one selected should be that which results in the most severe calculated consequences, for the spectrum of postulated breaks and single failures analyzed.

1. *The Initial Stored Energy in the Fuel.* The steady-state temperature distribution and stored energy in the fuel before the hypothetical accident shall be calculated for the burn-up that yields the highest calculated cladding temperature (or, optionally, the highest calculated stored energy.) To accomplish this, the thermal conductivity of the UO_2 shall be evaluated as a function of burn-up and temperature, taking into consideration differences in initial density, and the thermal conductance of the gap between the UO_2 and the cladding shall be evaluated as a function of the burn-up, taking into consideration fuel densification and expansion, the composition and pressure of the gases within the fuel rod, the initial cold gap dimension with its tolerances, and cladding creep.

2. *Fission Heat.* Fission heat shall be calculated using reactivity and reactor kinetics. Shutdown reactivities resulting from temperatures and voids shall be given their minimum plausible values, including allowance for uncertainties, for the range of power distribution shapes and peaking factors indicated to be studied above. Rod trip and insertion may be assumed if they are calculated to occur.

3. *Decay of Actinides.* The heat from the radioactive decay of actinides, including neptunium and plutonium generated during operation, as well as isotopes of uranium, shall be calculated in accordance with fuel cycle calculations and known radioactive properties. The actinide decay heat chosen shall be that appropriate for the time in the fuel cycle that yields the highest calculated fuel temperature during the LOCA.

4. *Fission Product Decay.* The heat generation rates from radioactive decay of fission products shall be assumed to be equal to 1.2 times the values for infinite operating time in the ANS Standard (Proposed American Nuclear Society Standards—"Decay Energy Release Rates Following Shutdown of Uranium-Fueled Thermal Reactors". Approved by Subcommittee ANS-5, ANS Standards Committee, October 1971). The fraction of the locally generated gamma energy that is deposited in the fuel (including the cladding) may be different from 1.0; the value used shall be justified by a suitable calculation.

5. *Metal-Water Reaction Rate.* The rate of energy release, hydrogen generation, and cladding oxidation from the metal/water reaction shall be calculated using the Baker-Just equation (Baker, L., Just, L. C., "Studies of Metal Water Reactions at High Temperatures, III. Experimental and Theoretical Studies of the Zirconium-Water Reaction," ANL-6548, page 7, May 1962). The reaction shall be assumed not to be steam limited. For rods whose cladding is calculated to rupture during the LOCA, the inside of the cladding shall also be assumed to react after the rupture. The calculation of the reaction rate on the inside of the cladding shall also follow the Baker-Just equation, starting at the time when the cladding is calculated to rupture, and extending around

the cladding inner circumference and axially no less than 1.5 inches each way from the location of the rupture, with the reaction assumed not to be steam limited.

6. *Reactor Internals Heat Transfer.* Heat transfer from piping, vessel walls, and non-fuel internal hardware shall be taken into account.

7. *Pressurized Water Reactor Primary-to-Secondary Heat Transfer.* Heat transferred between primary and secondary systems through heat exchangers (steam generators) shall be taken into account. (Not applicable to Boiling Water Reactors.)

B. Swelling and Rupture of the Cladding and Fuel Rod Thermal Parameters

Each evaluation model shall include a provision for predicting cladding swelling and rupture from consideration of the axial temperature distribution of the cladding and from the difference in pressure between the inside and outside of the cladding, both as functions of time. To be acceptable the swelling and rupture calculations shall be based on applicable data in such a way that the degree of swelling and incidence of rupture are not underestimated. The degree of swelling and rupture shall be taken into account in calculations of gap conductance, cladding oxidation and embrittlement, and hydrogen generation.

The calculations of fuel and cladding temperatures as a function of time shall use values for gap conductance and other thermal parameters as functions of temperature and other applicable time-dependent variables. The gap conductance shall be varied in accordance with changes in gap dimensions and any other applicable variables.

C. Blowdown Phenomena

1. *Break Characteristics and Flow.* a. In analyses of hypothetical loss-of-coolant accidents, a spectrum of possible pipe breaks shall be considered. This spectrum shall include instantaneous double-ended breaks ranging in cross-sectional area up to and including that of the largest pipe in the primary coolant system. The analysis shall also include the effects of longitudinal splits in the largest pipes, with the split area equal to the cross-sectional area of the pipe.

b. *Discharge Model.* For all times after the discharging fluid has been calculated to be two-phase in composition, the discharge rate shall be calculated by use of the Moody model (F. J. Moody, "Maximum Flow Rate of a Single Component, Two-Phase Mixture," *Journal of Heat Transfer, Trans American Society of Mechanical Engineers,* 87, No. 1, February, 1965). The calculation shall be conducted with at least three values of a discharge coefficient applied to the postulated break area, these values spanning the range from 0.6 to 1.0. If the results indicate that the maximum clad temperature for the hypothetical accident is to be found at an even lower value of the discharge coefficient, the range of discharge coefficients shall be extended until the maximum clad temperature calculated by this variation has been achieved.

c. *End of Blowdown.* (Applies Only to Pressurized Water Reactors.) For postulated cold leg breaks, all emergency cooling water injected into the inlet lines or the reactor vessel during the bypass period shall in the calculations be subtracted from the reactor vessel calculated inventory. This may be executed in the calculation during the bypass period, or as an alternative the amount of emergency core cooling water calculated to be injected during the bypass period may be subtracted later in the calculation from the water remaining in the inlet lines, downcomer, and reactor vessel lower plenum after the bypass period. This bypassing shall end in the calculation at a time designated as the "end of bypass," after which the expulsion or entrainment mechanisms responsible for the bypassing are calculated not to be effective. The end-of-bypass definition used in the calculation shall be justified by a suitable combination of analysis and experimental data. Acceptable methods for defining "end of bypass" include, but are not limited to, the following: (1) Prediction of the blowdown calculation of downward flow in the downcomer for the remainder of the blowdown period; (2) Prediction of a threshold for droplet entrainment in the upward velocity, using local fluid conditions and a conservative critical Weber number.

d. *Noding Near the Break and the ECCS Injection Points.* The noding in the vicinity of and including the broken or split sections of pipe and the points of ECCS injection shall be chosen to permit a reliable analysis of the thermodynamic history in these regions during blowdown.

2. *Frictional Pressure Drops.* The frictional losses in pipes and other components including the reactor core shall be calculated using models that include realistic variation of friction factor with Reynolds number, and realistic two-phase friction multipliers that have been adequately verified by comparison with experimental data, or models that prove at least equally conservative with respect to maximum clad temperature calculated during the hypothetical accident. The modified Baroczy correlation (Baroczy, C. J., "A Systematic Correlation for Two-Phase Pressure Drop," *Chem. Enging. Prog. Symp. Series,* No. 64, Vol. 62, 1965) or a combination of the Thom correlation (Thom, J.R.S., "Prediction of Pressure Drop During Forced Circulation Boiling of Water," *Int. J. of Heat & Mass Transfer,* 7, 709-724, 1964) for pressures equal to or greater than 250 psia and the Martinelli-Nelson correlation

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(Martinelli, R. C. Nelson, D.B., "Prediction of Pressure Drop During Forced Circulation Boiling of Water," *Transactions of ASME*, 695-702, 1948) for pressures lower than 250 psia is acceptable as a basis for calculating realistic two-phase friction multipliers.

3. *Momentum Equation.* The following effects shall be taken into account in the conservation of momentum equation: (1) temporal change of momentum, (2) momentum convection, (3) area change momentum flux, (4) momentum change due to compressibility, (5) pressure loss resulting from wall friction, (6) pressure loss resulting from area change, and (7) gravitational acceleration. Any omission of one or more of these terms under stated circumstances shall be justified by comparative analyses or by experimental data.

4. *Critical Heat Flux.* a. Correlations developed from appropriate steady-state and transient-state experimental data are acceptable for use in predicting the critical heat flux (CHF) during LOCA transients. The computer programs in which these correlations are used shall contain suitable checks to assure that the physical parameters are within the range of parameters specified for use of the correlations by their respective authors.

b. Steady-state CHF correlations acceptable for use in LOCA transients include, but are not limited to, the following:

(1) *W 3.* L. S. Tong, "Prediction of Departure from Nucleate Boiling for an Axially Non-uniform Heat Flux Distribution," *Journal of Nuclear Energy,* Vol. 21, 241-248, 1967.

(2) *B&W-2.* J. S. Gellerstedt, R. A. Lee, W. J. Oberjohn, R. H. Wilson, L. J. Stanek, "Correlation of Critical Heat Flux in a Bundle Cooled by Pressurized Water," *Two-Phase Flow and Heat Transfer in Rod Bundles,* ASME, New York, 1969.

(3) *Hench-Levy.* J. M. Healzer, J. E. Hench, E. Janssen, S. Levy, "Design Basis for Critical Heat Flux Condition in Boiling Water Reactors," APED-5186, GE Company Private report, July 1966.

(4) *Macbeth. R. V.* Macbeth, "An Appraisal of Forced Convection Burnout Data," *Proceedings of the Institute of Mechanical Engineers,* 1965-1966.

(5) *Barnett.* P. G. Barnett, "A Correlation of Burnout Data for Uniformly Heated Annuli and Its Uses for Predicting Burnout in Uniformly Heated Rod Bundles," AEEW-R 463, 1966.

(6) *Hughes.* E. D. Hughes, "A Correlation of Rod Bundle Critical Heat Flux for Water in the Pressure Range 150 to 725 psia," IN-1412, Idaho Nuclear Corporation, July 1970.

c. Correlations of appropriate transient CHF data may be accepted for use in LOCA transient analyses if comparisons between the data and the correlations are provided to demonstrate that the correlations predict values of CHF which allow for uncertainty in the experimental data throughout the range of parameters for which the correlations are to be used. Where appropriate, the comparisons shall use statistical uncertainty analysis of the data to demonstrate the conservatism of the transient correlation.

d. Transient CHF correlations acceptable for use in LOCA transients include, but are not limited to, the following:

(1) *GE transient CHF.* B. C. Slifer, J. E. Hench, "Loss-of-Coolant Accident and Emergency Core Cooling Models for General Electric Boiling Water Reactors," NEDO-10329, General Electric Company, Equation C-32, April 1971.

e. After CHF is first predicted at an axial fuel rod location during blowdown, the calculation shall not use nucleate boiling heat transfer correlations at that location subsequently during the blowdown even if the calculated local fluid and surface conditions would apparently justify the reestablishment of nucleate boiling. Heat transfer assumptions characteristic of return to nucleate boiling (rewetting) shall be permitted when justified by the calculated local fluid and surface conditions during the reflood portion of a LOCA.

5. *Post-CHF Heat Transfer Correlations.* a. Correlations of heat transfer from the fuel cladding to the surrounding fluid in the post-CHF regimes of transition and film boiling shall be compared to applicable steady-state and transient-state data using statistical correlation and uncertainty analyses. Such comparison shall demonstrate that the correlations predict values of heat transfer co-efficient equal to or less than the mean value of the applicable experimental heat transfer data throughout the range of parameters for which the correlations are to be used. The comparisons shall quantify the relation of the correlations to the statistical uncertainty of the applicable data.

b. The Groeneveld flow film boiling correlation (equation 5.7 of D.C. Groeneveld, "An Investigation of Heat Transfer in the Liquid Deficient Regime," AECL-3281, revised December 1969) and the Westinghouse correlation of steady-state transition boiling ("Proprietary Redirect/Rebuttal Testimony of Westinghouse Electric Corporation," USNRC Docket RM-50-1, page 25-1, October 26, 1972) are acceptable for use in the post-CHF boiling regimes. In addition, the transition boiling correlation of McDonough, Milich, and King (J.B. McDonough, W. Milich, E.C. King, "An Experimental Study of Partial Film Boiling Region with Water at Elevated Pressures in a Round Vertical Tube," Chemical Engineering Progress Symposium Series, Vol. 57, No. 32, pages 197-208, (1961) is suitable for use between nucleate and film boiling. Use of all these correlations is restricted as follows:

(1) The Groeneveld correlation shall not be used in the region near its low-pressure singularity,

(2) The first term (nucleate) of the Westinghouse correlation and the entire McDonough, Milich, and King correlation shall not be used during the blowdown after the temperature difference between the clad and the saturated fluid first exceeds 300° F,

(3) Transition boiling heat transfer shall not be reapplied for the remainder of the LOCA blowdown, even if the clad superheat returns below 300° F, except for the reflood portion of the LOCA when justified by the calculated local fluid and surface conditions.

c. Evaluation models approved after October 17, 1988, which make use of the Dougall-Rohsenow flow film boiling correlation (R.S. Dougall and W.M. Rohsenow, "Film Boiling on the Inside of Vertical Tubes with Upward Flow of Fluid at Low Qualities," MIT Report Number 9079 26, Cambridge, Massachusetts, September 1963) may not use this correlation under conditions where nonconservative predictions of heat transfer result. Evaluation models that make use of the Dougall-Rohsenow correlation and were approved prior to October 17, 1988, continue to be acceptable until a change is made to, or an error is corrected in, the evaluation model that results in a significant reduction in the overall conservatism in the evaluation model. At that time continued use of the Dougall-Rohsenow correlation under conditions where nonconservative predictions of heat transfer result will no longer be acceptable. For this purpose, a significant reduction in the overall conservatism in the evaluation model would be a reduction in the calculated peak fuel cladding temperature of at least 50 °F from that which would have been calculated on October 17, 1988, due either to individual changes or error corrections or the net effect of an accumulation of changes or error corrections.

6. *Pump Modeling.* The characteristics of rotating primary system pumps (axial flow, turbine, or centrifugal) shall be derived from a dynamic model that includes momentum transfer between the fluid and the rotating member, with variable pump speed as a function of time. The pump model resistance used for analysis should be justified. The pump model for the two-phase region shall be verified by applicable two-phase pump performance data. For BWR's after saturation is calculated at the pump suction, the pump head may be assumed to vary linearly with quality, going to zero for one percent quality at the pump suction, so long as the analysis shows that core flow stops before the quality at pump suction reaches one percent.

7. *Core Flow Distribution During Blowdown.* (Applies only to pressurized water reactors.)

a. The flow rate through the hot region of the core during blowdown shall be calculated as a function of time. For the purpose of these calculations the hot region chosen shall not be greater than the size of one fuel assembly. Calculations of average flow and flow in the hot region shall take into account cross flow between regions and any flow blockage calculated to occur during blowdown as a result of cladding swelling or rupture. The calculated flow shall be smoothed to eliminate any calculated rapid oscillations (period less than 0.1 seconds).

b. A method shall be specified for determining the enthalpy to be used as input data to the hot channel heatup analysis from quantities calculated in the blowdown analysis, consistent with the flow distribution calculations.

D. Post-Blowdown Phenomena; Heat Removal by the ECCS

1. *Single Failure Criterion.* An analysis of possible failure modes of ECCS equipment and of their effects on ECCS performance must be made. In carrying out the accident evaluation the combination of ECCS subsystems assumed to be operative shall be those available after the most damaging single failure of ECCS equipment has taken place.

2. *Containment Pressure.* The containment pressure used for evaluating cooling effectiveness during reflood and spray cooling shall not exceed a pressure calculated conservatively for this purpose. The calculation shall include the effects of operation of all installed pressure-reducing systems and processes.

3. *Calculation of Reflood Rate for Pressurized Water Reactors.* The refilling of the reactor vessel and the time and rate of reflooding of the core shall be calculated by an acceptable model that takes into consideration the thermal and hydraulic characteristics of the core and of the reactor system. The primary system coolant pumps shall be assumed to have locked impellers if this assumption leads to the maximum calculated cladding temperature; otherwise the pump rotor shall be assumed to be running free. The ratio of the total fluid flow at the core exit plane to the total liquid flow at the core inlet plane (carryover fraction) shall be used to determine the core exit flow and shall be determined in accordance with applicable experimental data (for example, "PWR FLECHT (Full Length Emergency Cooling Heat Transfer) Final Report," Westinghouse Report WCAP-7665, April 1971; "PWR Full Length Emergency Cooling Heat Transfer (FLECHT) Group I Test Report," Westinghouse Report WCAP-7435, January 1970; "PWR FLECHT (Full Length

Emergency Cooling Heat Transfer) Group II Test Report," Westinghouse Report WCAP-7544, September 1970; "PWR FLECHT Final Report Supplement," Westinghouse Report WCAP-7931, October 1972).

The effects on reflooding rate of the compressed gas in the accumulator which is discharged following accumulator water discharge shall also be taken into account.

4. *Steam Interaction with Emergency Core Cooling Water in Pressurized Water Reactors.* The thermal-hydraulic interaction between steam and all emergency core cooling water shall be taken into account in calculating the core reflooding rate. During refill and reflood, the calculated steam flow in unbroken reactor coolant pipes shall be taken to be zero during the time that accumulators are discharging water into those pipes unless experimental evidence is available regarding the realistic thermal-hydraulic interaction between the steam and the liquid. In this case, the experimental data may be used to support an alternate assumption.

5. *Refill and Reflood Heat Transfer for Pressurized Water Reactors.* For reflood rates of one inch per second or higher, reflood heat transfer coefficients shall be based on applicable experimental data for unblocked cores including FLECHT results ("PWR FLECHT (Full Length Emergency Cooling Heat Transfer) Final Report," Westinghouse Report WCAP-7665, April 1971). The use of a correlation derived from FLECHT data shall be demonstrated to be conservative for the transient to which it is applied; presently available FLECHT heat transfer correlations ("PWR Full Length Emergency Cooling Heat Transfer (FLECHT) Group I Test Report," Westinghouse Report WCAP-7544, September 1970; "PWR FLECHT Final Report Supplement," Westinghouse Report WCAP-7931, October 1972) are not acceptable. New correlations or modifications to the FLECHT heat transfer correlations are acceptable only after they are demonstrated to be conservative, by comparison with FLECHT data, for a range of parameters consistent with the transient to which they are applied.

During refill and during reflood when reflood rates are less than one inch per second, heat transfer calculations shall be based on the assumption that cooling is only by steam, and shall take into account any flow blockage calculated to occur as a result of cladding swelling or rupture as such blockage might affect both local steam flow and heat transfer.

6. *Convective Heat Transfer Coefficients for Boiling Water Reactor Fuel Rods Under Spray Cooling.* Following the blowdown period, convective heat transfer shall be calculated using coefficients based on appropriate experimental data. For reactors with jet pumps and having fuel rods in a 7 x 7 fuel assembly array, the following convective coefficients are acceptable:

a. During the period following lower plenum flashing but prior to the core spray reaching rated flow, a convective heat transfer coefficient of zero shall be applied to all fuel rods.

b. During the period after core spray reaches rated flow but prior to reflooding, convective heat transfer coefficients of 3.0, 3.5, 1.5, and 1.5 Btu-hr^{-1}-ft^{-2}°F^{-1} shall be applied to the fuel rods in the outer corners, outer row, next to outer row, and to those remaining in the interior, respectively, of the assembly.

c. After the two-phase reflooding fluid reaches the level under consideration, a convective heat transfer coefficient of 25 Btu-hr^{-1}-ft^{-2}°F^{-1} shall be applied to all fuel rods.

7. *The Boiling Water Reactor Channel Box Under Spray Cooling.* Following the blowdown period, heat transfer from, and wetting of, the channel box shall be based on appropriate experimental data. For reactors with jet pumps and fuel rods in a 7 x 7 fuel assembly array, the following heat transfer coefficients and wetting time correlation are acceptable.

a. During the period after lower plenum flashing, but prior to core spray reaching rated flow, a convective coefficient of zero shall be applied to the fuel assembly channel box.

b. During the period after core spray reaches rated flow, but prior to wetting of the channel, a convective heat transfer coefficient of 5 Btu-hr^{-1}-ft^{-2}-°F^{-1} shall be applied to both sides of the channel box.

c. Wetting of the channel box shall be assumed to occur 60 seconds after the time determined using the correlation based on the Yamanouchi analysis ("Loss-of-Coolant Accident and Emergency Core Cooling Models for General Electric Boiling Water Reactors," General Electric Company Report NEDO-10329, April 1971).

II. REQUIRED DOCUMENTATION

1. a. A description of each evaluation model shall be furnished. The description shall be sufficiently complete to permit technical review of the analytical approach including the equations used, their approximations in difference form, the assumptions made, and the values of all parameters or the procedure for their selection, as for example, in accordance with a specified physical law or empirical correlation.

b. A complete listing of each computer program, in the same form as used in the evaluation model, must be furnished to the Nuclear Regulatory Commission upon request.

2. For each computer program, solution convergence shall be demonstrated by stud-

ies of system modeling or noding and calculational time steps.

3. Appropriate sensitivity studies shall be performed for each evaluation model, to evaluate the effect on the calculated results of variations in noding, phenomena assumed in the calculation to predominate, including pump operation or locking, and values of parameters over their applicable ranges. For items to which results are shown to be sensitive, the choices made shall be justified.

4. To the extent practicable, predictions of the evaluation model, or portions thereof, shall be compared with applicable experimental information.

5. General Standards for Acceptability—Elements of evaluation models reviewed will include technical adequacy of the calculational methods, including: For models covered by § 50.46(a)(1)(ii), compliance with required features of section I of this Appendix K; and, for models covered by § 50.46(a)(1)(i), assurance of a high level of probability that the performance criteria of § 50.46(b) would not be exceeded.

[39 FR 1003, Jan. 4, 1974, as amended at 51 FR 40311, Nov. 6, 1986; 53 FR 36005, Sept. 16, 1988]

APPENDIX L—INFORMATION REQUESTED BY THE ATTORNEY GENERAL FOR ANTITRUST REVIEW FACILITY LICENSE APPLICATIONS

Introduction. The information in this appendix is that requested by the Attorney General in connection with his review, pursuant to section 105c of the Atomic Energy Act of 1954, as amended, of certain license applications for nuclear power plants. The applicant shall submit the information as a separate document titled, "Information Requested by the Attorney General for Antitrust Review." Twenty (20) copies shall be submitted prior to any other part of the facility license application as provided in § 50.33a and in accordance with § 2.101 of this chapter.

I. DEFINITIONS

1. "Applicant" means the entity applying for authority to construct or operate subject unit and each corporate parent, subsidiary and affiliate. Where application is made by two or more electric utilities not under common ownership or control, each utility, subject to the applicable exclusions contained in § 50.33a, should set forth separate responses to each item herein.

2. "Subject unit" means the nuclear generating unit or units for which application for construction or operation is being made.

3. "Electric utility" or "system" means any entity owning, controlling or operating facilities for the generation or transmission or distribution of electric power.

4. "Coordination" means any arrangement between two or more systems for generation and transmission planning, or operation of two or more interconnected electric utilities not under common ownership or control, including but not limited to arrangements for sharing operating and installed reserves, arrangements for joint or staggered construction of generating facilities, economy energy transactions, capacity transactions based on load diversities, thermalhydro generation pooling, common maintenance arrangements, and joint use of transmission facilities or wheeling.

5. "Coordinating power and energy" means energy transmitted in accordance with an arrangement for coordination including but not limited to emergency power, economy energy, deficiency power and associated energy, and maintenance power and energy.

6. Except where specifically mentioned otherwise, the term "reserve generating capacity" or "reserves" shall refer to installed reserves in contrast to spinning or operating reserves.

II. REQUIRED INFORMATION

1. State separately for hydroelectric and thermal generating resources applicant's most recent peak load and dependable capacity for the same time period. State applicant's dependable capacity at time of system peak for each of the next 10 years for which information is available. Identify each new unit or resource. For hydroelectric generating capacity, indicate the number of kilowatt hours of use associated with each kilowatt of capacity during the "adverse water year" upon which dependable capacity is based. Indicate average annual kilowatt hour loads per kilowatt, associated with each system peak shown (exclusive of interchange arrangements).

2. State applicant's estimated annual load growth for each of the next 20 years or for the period applicant utilizes in system planning. Indicate growth both in kilowatt requirements and kilowatt hour requirements.

3. State estimated annual load growth in kilowatts and kilowatt hours of companies or pools upon which the economic justification of the subject unit is based for each of the next 20 years or for the period applicant utilized in system planning. Identify each company or pool member.

4. For the year the subject unit would first come on line, state estimated annual load growth in kilowatts and kilowatt hours of any coordinating group or pool of which the applicant is a member (other than the coordinating group or pool referred to in the applicant's response to item 3) which has generating and/or transmission plan-

ning functions. Identify each company or pool member whose loads are indicated in the response thereto.

5. State applicant's minimum installed reserve criterion (as a percentage of load)[1] for the period when the subject unit will first come on line. If the applicant shares reserves with other systems, identify the other systems and provide minimum installed reserve criterion (as a percentage of loan)[1] by contracting parties or pool for the period when the proposed unit will first come on line.

6. Describe methods used as a basis to establish, or as a guide in establishing the criteria for applicant's and/or applicant's pool's minimum amount of installed reserves (e.g., (a) single largest unit down, (b) probability methods such as loss of load one day in 20 years, loss of capacity once in 5 years, (c) other methods and/or (d) judgment. List contingencies other than risk of forced outage that enter into the determination).

7. Indicate whether applicant's system interconnections are credited explicitly or implicitly in establishing applicant's installed reserves.

8. List rights to receive emergency power and obligations to deliver emergency power, rights or obligations to receive or deliver deficiency power or unit power, or other coordinating arrangements, by reference to applicant's Federal Power Commission (FPC) rate schedules (i.e., ABC Power & Light Co., FPC Rate Schedule No. 15 including supplements 1-5),[2] and also by reference to applicant's state commission filings. Where documents are not on file with the FPC, supply copies, or where not reduced to writing, describe arrangements. Identify for each such arrangement' the participating parties other than applicant. Provide one line electrical and geographic diagrams of coordinating groups or power pools (with generation or transmission planning functions) of which applicant's generation and transmission facilities constitute a part.

9. List, and provide the mailing address for non-affiliated electric utility systems with peak loads smaller than applicant's which serve either at wholesale or at retail adjacent to areas served by the applicant.

Provide a geographic one-line diagram of applicant's generating and transmission facilities (including subtransmission) indicating the location of adjacent systems and as to such systems indicate (if available) their load, their annual load growth, their generating capacity, their largest thermal generating unit size, and their minimum reserve criteria.

10. List separately those systems in Item 9 which purchase from applicant (a) all bulk power supply and (b) systems which purchase partial bulk power supply requirements. Where information is available to applicant, identify those Item 9 systems purchasing part or all of their bulk power supply requirements from suppliers other than applicant.

11. State as to all power generated and sold by applicant the most recent average cost of bulk power supply experienced by applicant (a) at site of generating facilities, (b) at the delivery points from the primary transmission (backbone) system, (c) at delivery points from the secondary transmission system, and (d) at delivery points from the distribution system, in terms of dollars per kilowatt per year, in mills per kilowatt hour, and in both the kilowatt costs and kilowatt hour costs divided by the kilowatt hours. If wholesale sales are made at varying voltages, indicate average costs at each voltage.

12. State (a) for generating facilities and (b) for transmission subdivided by voltage classes, the most recent estimated cost of applicant's bulk power supply expansion program of which the subject unit is a part, in terms of dollars per kilowatt per year, in mills per kilowatt hour and in both the kilowatt costs and kilowatt hour costs divided by the kilowatt hours. Also state separately the most recently estimated cost of the subject unit(s).

13. List and describe all requests for, or indications of interest in, interconnection and/or coordination and purchases or sales of coordinating power and energy from adjacent utilities listed in item 9 since 1960 and state applicant's response thereto. List and describe all requests for, or indications of interest in, supply of full or partial requirements of bulk power for the same period and state applicant's response thereto.

14. List (a) agreements to which applicant is a party (reproducing relevant paragraphs) and (b) State laws (supply citations only) which restrict or preclude coordination by, with, between, or among any electric utilities or systems identified in applicant's response to items 8 and 9. List (a) agreements to which the applicant is a party (reproducing relevant paragraphs) and (b) State laws (supply citations only) which restrict or preclude substitution of service or establishment of service of full or partial bulk power supply requirements by an electric utility other than applicant to systems identified in items 8 and 9. Where the contract provision appears in contracts or rate schedules on file with a Federal agency, identify each in the same form as in previous responses. Where the contract has not been filed with

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[1] Indicate whether loads other than peak loads are considered.

[2] List separately and identify certificates of concurrence.

a Federal agency, a copy should be supplied unless it has been supplied pursuant to another item hereto. Where it is not in writing, it should be described.

15. State, at point of delivery, average future costs of power purchased from applicant to adjacent systems identified in applicant's response to item 9 in terms of dollars/month/kw for capacity, mills/kw for energy and mills/kwh for both power and energy at purchaser's present load factor (a) at present load, (b) at 50 percent increase over present load, (c) at 100 percent increase over present load, and (d) at 200 percent increase over present load. (All costs should be determined under present rate schedules.) Where sales are made under contracts or rate schedules on file with a Federal agency and not included in the response to item 9, identify each in the same form as in previous responses. Where the contract has not been filed with a Federal agency, a copy should be supplied.

16. State whether applicant has prepared, caused to be prepared, or received engineering studies for generation and transmission expansion programs which include loads of each system in item 9.

17. List adjacent systems to which applicant has offered to sponsor or to conduct system surveys in contemplation of an offer by applicant to purchase, merge or consolidate with said adjacent system, subsequent to January 1, 1960.

18. List applicant's offers or proposals to purchase, merge or consolidate with electric utilities, subsequent to January 1, 1960.

19. List all acquisitions of or mergers or consolidations with electric utilities by applicant, subsequent to January 1, 1960, including:

(a) The name and principal place of business of the system prior to the acquisition, merger or consolidation;

(b) The date the acquisition, merger or consolidation was consummated;

(c) Gross annual revenue and most recent peak load, dependable capacity and the largest thermal generating unit of the system, prior to the dates of consummation.

20. State applicant's six (or fewer if there are not six) lowest industrial or large commercial rates for firm electric power supply in terms of cost for power and energy in mills per kilowatt hour (and separately, the demand and energy components) and indicate the portion of the charge attributed to bulk power supply. State the rates or rate blocks applicant utilizes for its six (or fewer if there are not six) promotional services such as electric space heating, electric hot water heating, and the like, in terms of mills per kilowatt hour for power and energy and indicate the portion of the rate or rate blocks attributed to bulk power supply.

[38 FR 3956, Feb. 9, 1973, as amended at 39 FR 34395, Sept. 25, 1974; 43 FR 49775, Oct. 25, 1978; 44 FR 60716, Oct. 22, 1979]

APPENDIX M—STANDARDIZATION OF DESIGN; MANUFACTURE OF NUCLEAR POWER REACTORS; CONSTRUCTION AND OPERATION OF NUCLEAR POWER REACTORS MANUFACTURED PURSUANT TO COMMISSION LICENSE

Section 101 of the Atomic Energy Act of 1954, as amended, and § 50.10 require a Commission license to transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, possess, use, import, or export any production or utilization facility. The regulations in the part require the issuance of a construction permit by the Commission before commencement of construction of a production or utilization facility, and the issuance of an operating license before operation of the facility. The provisions of this part relating to the facility licensing process are, in general, predicated on the assumption that the facility will be assembled and constructed on the site at which it is to be operated. In those circumstances, both facility design and site-related issues can be considered in the initial, construction permit stage of the licensing process.

However, under the Atomic Energy Act, a license may be sought and issued authorizing the manufacture of facilities but not their construction and installation at the sites on which the facilities are to be operated. Prior to the "commencement of construction", as defined in § 50.10(c), of a facility (manufactured pursuant to such a Commission license) on the site at which it is to operate—that is preparation of the site and installation of the facility—a construction permit that, among other things, reflects approval of the site on which the facility is to be operated, must be issued by the Commission. This appendix sets out the particular requirements and provisions applicable to such situations where nuclear power reactors to be manufactured pursuant to a Commission license and subsequently installed at the site pursuant to a Commission construction permit, are of the type described in § 50.22. It thus codifies one approach to the standardization of nuclear power reactors.

1. Except as otherwise specified in this appendix or as the context otherwise indicates, the provisions in this part applicable to construction permits, including the requirement in § 50.58 for review of the application by the Advisory Committee on Reactor Safeguards and the holding of a public hearing, apply in context, with respect to matters of radiological health and safety,

environmental protection, and the common defense and security, to licenses pursuant to this Appendix M to manufacture nuclear power reactors (manufacturing licenses) to be operated at sites not identified in the license application.

2. An application for a manufacturing license pursuant to this Appendix M must be submitted, as specified in § 50.4, and meet all the requirements of §§ 50.34(a) (1)-(9) and 50.34a (a) and (b), except that the preliminary safety analysis report shall be designated as a "design report" and any required information or analyses relating to site matters shall be predicated on postulated site parameters which must be specified in the application. The application must also include information pertaining to design features of the proposed reactor(s) that affect plans for coping with emergencies in the operation of the reactor(s).

3. An applicant for a manufacturing license pursuant to this Appendix M shall submit with his application an environmental report as required of applicants for construction permits in accordance with Subpart A of Part 51 of this chapter, provided, however, that such report shall be directed at the manufacture of the reactor(s) at the manufacturing site; and, in general terms, at the construction and operation of the reactor(s) at an hypothetical site or sites having characteristics that fall within the postulated site parameters. The related draft and final environmental impact statement prepared by the Commission's regulatory staff will be similarly directed.

4. (a) Sections 50.10 (b) and (c), 50.12(b), 50.23, 50.30(d), 50.34(a)(10), 50.34a(c), 50.35 (a) and (c), 50.40(a), 50.45, 50.55(d), 50.56, and Appendix J do not apply to manufacturing licenses. Appendices E and H apply to manufacturing licenses only to the extent that the requirements of these appendixes involve facility design features.

(b) The financial information submitted pursuant to § 50.33(f) and Appendix C shall be directed at a demonstration of the financial qualifications of the applicant for the manufacturing license to carry out the manufacturing activity for which the license is sought.

5. The Commission may issue a license to manufacture one or more nuclear power reactors to be operated at sites not identified in the license application if the Commission finds that:

(a) The applicant has described the proposed design of and the site parameters postulated for the reactor(s), including, but not limited to, the principal architectural and engineering criteria for the design, and has identified the major features or components incorporated therein for the protection of the health and safety of the public.

(b) Such further technical or design information as may be required to complete the design report and which can reasonably be left for later consideration, will be supplied in a supplement to the design report.

(c) Safety features or components, if any, which require research and development have been described by the applicant and the applicant has identified, and there will be conducted a research and development program reasonably designed to resolve any safety questions associated with such features or components; and

(d) On the basis of the foregoing, there is reasonable assurance that (i) such safety questions will be satisfactorily resolved before any of the proposed nuclear power reactor(s) are removed from the manufacturing site and (ii) taking into consideration the site criteria contained in Part 100 of this chapter, the proposed reactor(s) can be constructed and operated at sites having characteristics that fall within the site parameters postulated for the design of the reactor(s) without undue risk to the health and safety of the public.

(e) The applicant is technically and financially qualified to design and manufacture the proposed nuclear power reactor(s).

(f) The issuance of a license to the applicant will not be inimical to the common defense and security or to the health and safety of the public.

(g) On the basis of the evaluations and analyses of the environmental effects of the proposed action required by Subpart A of Part 51 of this chapter and paragraph 3 of this Appendix, the action called for is the issuance of the license.

NOTE: When an applicant has supplied initially all of the technical information required to complete the application, including the final design of the reactor(s), the findings required for the issuance of the license will be appropriately modified to reflect that fact.

6. Each manufacturing license issued pursuant to this appendix will specify the number of nuclear power reactors authorized to be manufactured and the latest date for the completion of the manufacture of all such reactors. Upon good cause shown, the Commission will extend such completion date for a reasonable period of time.

7. The holder of a manufacturing license issued pursuant to this Appendix M shall submit to the Commission the final design of the nuclear power reactor(s) covered by the license as soon as such design has been completed. Such submittal shall be in the form of an application for amendment of the manufacturing license.

8. The prohibition in § 50.10(c) against commencement of construction of a production or utilization facility prior to issuance of a construction permit applies to the transport of a nuclear power reactor(s) man-

ufactured pursuant to a license issued pursuant to this appendix from the manufacturing facility to the site at which the reactor(s) will be installed and operated. In addition, such nuclear power reactor(s) shall not be removed from the manufacturing site until the final design of the reactor(s) has been approved by the Commission in accordance with paragraph 7.

9. An application for a permit to construct a nuclear power reactor(s) which is the subject of an application for a manufacturing license pursuant to this Appendix M need not contain such information or analyses as have previously been submitted to the Commission in connection with the application for a manufacturing license, but shall contain, in addition to the information and analyses otherwise required by §§ 50.34(a) and 50.34a, sufficient information to demonstrate that the site on which the reactor(s) is to be operated falls within the postulated site parameters specified in the relevant manufacturing license application.

10. The Commission may issue a permit to construct a nuclear power reactor(s) which is the subject of an application for a manufacturing license pursuant to this Appendix M if the Commission (a) finds that the site on which the reactor is to be operated falls within the postulated site parameters specified in the relevant application for a manufacturing license and (b) makes the findings otherwise required by this part. In no event will a construction permit be issued until the relevant manufacturing license has been issued.

11. An operating license for a nuclear power reactor(s) that has been manufactured under a Commission license issued pursuant to this Appendix M may be issued by the Commission pursuant to § 50.57 and Subpart A of Part 51 of this chapter except that the Commission shall find, pursuant to § 50.57(a)(1), that construction of the reactor(s) has been substantially completed in conformity with both the manufacturing license and the construction permit and the applications therefor, as amended, and the provisions of the Act, and the rules and regulations of the Commission. Notwithstanding the other provisions of this paragraph, no application for an operating license for a nuclear power reactor(s) that has been manufactured under a Commission license issued pursuant to this Appendix M will be docketed until the application for an amendment to the relevant manufacturing license required by paragraph 7 has been docketed.

12. In making the findings required by this part for the issuance of a construction permit or an operating license for a nuclear power reactor(s) that has been manufactured under a Commission license issued pursuant to this appendix, or an amendment to such a manufacturing license, construction permit, or operating license, the Commission will treat as resolved those matters which have been resolved at an earlier stage of the licensing process, unless there exists significant new information that substantially affects the conclusion(s) reached at the earlier stage or other good cause.

[38 FR 30253, Nov. 2, 1973, as amended at 49 FR 9404, Mar. 12, 1984; 49 FR 35754, Sept. 12, 1984; 50 FR 18853, May 3, 1985; 51 FR 40311, Nov. 6, 1986]

APPENDIX N—STANDARDIZATION OF NUCLEAR POWER PLANT DESIGNS: LICENSES TO CONSTRUCT AND OPERATE NUCLEAR POWER REACTORS OF DUPLICATE DESIGN AT MULTIPLE SITES

Section 101 of the Atomic Energy Act of 1954, as amended, and § 50.10 of this part require a Commission license to transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, possess, use, import or export any production or utilization facility. The regulations in this part require the issuance of a construction permit by the Commission before commencement of construction of a production or utilization facility, except as provided in § 50.10(e), and the issuance of an operating license before operation of the facility.

The Commission's regulations in Part 2 of this chapter specifically provide for the holding of hearings on particular issues separately from other issues involved in hearings in licensing proceedings (§ 2.761a, Appendix A, section I(c)), and for the consolidation of adjudicatory proceedings and of the presentations of parties in adjudicatory proceedings such as licensing proceedings (§§ 2.715a, 2.716).

This appendix sets out the particular requirements and provisions applicable to situations in which applications are filed by one or more applicants for licenses to construct and operate nuclear power reactors of essentially the same design to be located at different sites.[1]

1. Except as otherwise specified in this appendix or as the context otherwise indicates, the provisions of this part applicable to construction permits and operating licenses, including the requirement in § 50.58 for review of the application by the Advisory Committee on Reactor Safeguards and the holding of public hearings, apply to con-

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[1] If the design for the power reactor(s) proposed in a particular application is not identical to the others, that application may not be processed under this appendix and Subpart D of Part 2 of this chapter.

struction permits and operating licenses subject to this Appendix N.

2. Applications for construction permits submitted pursuant to this Appendix must include the information required by §§ 50.33, 50.33a, 50.34(a) and 50.34a (a) and (b) and be submitted as specified in § 50.4. The applicant shall also submit the information required by § 51.50 of this chapter.

For the technical information required by §§ 50.34(a) (1) through (5) and (8) and 50.34a (a) and (b), reference may be made to a single preliminary safety analysis of the design[1] which, for the purposes of § 50.34(a)(1) includes one set of site parameters postulated for the design of the reactors, and an analysis and evaluation of the reactors in terms of such postulated site parameters. Such single preliminary safety analysis shall also include information pertaining to design features of the proposed reactors that affect plans for coping with emergencies in the operation of the reactors, and shall describe the quality assurance program with respect to aspects of design, fabrication, procurement and construction that are common to all of the reactors.

3. Applications for operating licenses submitted pursuant to this Appendix N shall include the information required by §§ 50.33, 50.34(b) and (c), and 50.34a(c). The applicant shall also submit the information required by § 51.53 of this chapter. For the technical information required by §§ 50.34(b)(2) through (5) and 50.34a(c), reference may be made to a single final safety analysis of the design.

[40 FR 2977, Jan. 17, 1975, as amended at 49 FR 9405, Mar. 12, 1984; 51 FR 40311, Nov. 6, 1986]

APPENDIX O—STANDARDIZATION OF DESIGN: STAFF REVIEW OF STANDARD DESIGNS

This appendix sets out procedures for the filing, staff review and referral to the Advisory Committee on Reactor Safeguards of standard designs for a nuclear power reactor of the type described in § 50.22 or major portions thereof.

1. Any person may submit a proposed preliminary or final standard design for a nuclear power reactor of the type described in § 50.22 to the regulatory staff for its review. Such a submittal may consist of either the preliminary or final design for the entire reactor facility or the preliminary or final design of major portions thereof.

2. The submittal for review of the standard design must be made in the same manner and in the same number of copies as provided in §§ 50.4 and 50.30 for license applications.

3. The submittal for review of the standard design shall include the information described in § 50.33(a) through (d) and the applicable technical information required by §§ 50.34(a) and (b), as appropriate, and 50.34a (other than that required by §§ 50.34(a) (6) and (10), 50.34(b)(1), (6)(i), (ii), (iv), and (v) and 50.34(b) (7) and (8)). The submittal shall also include a description, analysis and evaluation of the interfaces between the submitted design and the balance of the nuclear power plant. With respect to the requirements of §§ 50.34(a)(1), the submittal for review of a standard design shall include the site parameters postulated for the design, and an analysis and evaluation of the design in terms of such postulated site parameters. The information submitted pursuant to § 50.34(a)(7) shall be limited to the quality assurance program to be applied to the design, procurement and fabrication of the structures, systems, and components for which design review has been requested and the information submitted pursuant to § 50.34(a)(9) shall be limited to the qualifications of the person submitting the standard design to design the reactor or major portion thereof. The submittal shall also include information pertaining to design features that affect plans for coping with emergencies in the operation of the reactor or major portion thereof.

4. Once the regulatory staff has initiated a technical review of a submittal under this appendix, the submittal will be referred to the Advisory Committee on Reactor Safeguards (ACRS) for a review and report.

5. Upon completion of their review of a submittal under this appendix, the regulatory staff shall publish in the FEDERAL REGISTER a determination as to whether or not the preliminary or final design is acceptable, subject to such conditions as may be appropriate, and make available in the Public Document Room an analysis of the design in the form of a report. An approved design shall be utilized by and relied upon by the regulatory staff and the ACRS in their review of any individual facility license application which incorporates by reference a design approved in accordance with this paragraph unless there exists significant new information which substantially affects the earlier determination or other good cause.

6. The determination and report by the regulatory staff shall not constitute a commitment to issue a permit or license, or in

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[1] As used in this appendix, the design of a nuclear power reactor included in a single referenced safety analysis report means the design of those structures, systems and components important to radiological health and safety and the common defense and security.

any way affect the authority of the Commission, Atomic Safety and Licensing Appeal Panel, Atomic Safety and Licensing Panel, and other presiding officers in any proceeding under Subpart G of Part 2 of this chapter.

7. The Commission may, on its own initiative or in response to a petition for rule making, approve the design in a rulemaking proceeding and in that event, the approved design will be subject to challenge only as provided in § 2.758 of this chapter. An environmental impact statement may be prepared for such a rule making action in accordance with §§ 51.20(b)(13) and 51.85 of this chapter. If an environmental impact statement is prepared, the Commission may require the petitioner for rulemaking to submit information to the Commission to aid the Commission in the preparation of the environmental impact statement.

8. Information requests to the approval holder regarding an approved design shall be evaluated prior to issuance to ensure that the burden to be imposed on respondents is justified in view of the potential safety significance of the issue to be addressed in the requested information. Each such evaluation performed by the NRC staff shall be in accordance with 10 CFR 50.54(f) and shall be approved by the Executive Director for Operations or his or her designee prior to issuance of the request.

[40 FR 2977, Jan. 17, 1975, as amended at 49 FR 9405, Mar. 12, 1984; 50 FR 38112, Sept. 20, 1985; 51 FR 40311, Nov. 6, 1986]

APPENDIX P—[RESERVED]

APPENDIX Q—PRE-APPLICATION EARLY REVIEW OF SITE SUITABILITY ISSUES

This appendix sets out procedures for the filing, Staff review, and referral to the Advisory Committee on Reactor Safeguards of requests for early review of one or more site suitability issues relating to the construction and operation of certain utilization facilities separately from and prior to the submittal of applications for construction permits for the facilities. The appendix also sets out procedures for the preparation and issuance of Staff Site Reports and for their incorporation by reference in applications for the construction and operation of certain utilization facilities. The utilization facilities are those which are subject to § 51.20(b) of this chapter and are of the type specified in § 50.21(b) (2) or (3) or § 50.22 or are testing facilities. This appendix does not apply to proceedings conducted pursuant to Subpart F of Part 2 of this chapter.

1. Any person may submit information regarding one or more site suitability issues to the Commission's Staff for its review separately from and prior to an application for a construction permit for a facility. Such a submittal shall be accompanied by any fee required by Part 170 of this chapter and shall consist of the portion of the information required of applicants for construction permits by §§ 50.33(a)-(c) and (e), and, insofar as it relates to the issue(s) of site suitability for which early review is sought, by §§ 50.34(a)(1) and 50.30(f), except that information with respect to operation of the facility at the projected initial power level need not be supplied.

2. The submittal for early review of site suitability issue(s) must be made in the same manner and in the same number of copies as provided in §§ 50.4 and 50.30 for license applications. The submittal must include sufficient information concerning a range of postulated facility design and operation parameters to enable the Staff to perform the requested review of site suitability issues. The submittal must contain suggested conclusions on the issues of site suitability submitted for review and must be accompanied by a statement of the bases or the reasons for those conclusions. The submittal must also list, to the extent possible, any long-range objectives for ultimate development of the site, state whether any site selection process was used in preparing the submittal, describe any site selection process used, and explain what consideration, if any, was given to alternative sites.

3. The Staff shall publish a notice of docketing of the submittal in the FEDERAL REGISTER, and shall send a copy of the notice of docketing to the Governor or other appropriate official of the State in which the site is located. This notice shall identify the location of the site, briefly describe the site suitability issue(s) under review, and invite comments from Federal, State, and local agencies and interested persons within 120 days of publication or such other time as may be specified, for consideration by the staff in connection with the initiation or outcome of the review and, if appropriate by the ACRS, in connection with the outcome of their review. The person requesting review shall serve a copy of the submittal on the Governor or other appropriate official of the State in which the site is located, and on the chief executive of the municipality in which the site is located or, if the site is not located in a municipality, on the chief executive of the county. The portion of the submittal containing information required of applicants for construction permits by §§ 50.33(a)-(c) and (e) and 50.34(a)(1) will be referred to the Advisory Committee on Reactor Safeguards (ACRS) for a review and report. There will be no referral to the ACRS unless early review of the site safety issues under § 50.34(a)(1) is requested.

4. Upon completion of review by the staff and, if appropriate by the ACRS, of a submittal under this appendix, the staff shall prepare a Staff Site Report which shall identify the location of the site, state the site suitability issues reviewed, explain the nature and scope of the review, state the conclusions of the staff regarding the issues reviewed and state the reasons for those conclusions. Upon issuance of a Staff Site Report, the Staff shall publish a notice of the availability of the report in the FEDERAL REGISTER and shall place copies of the report in the Commission's Public Document Room at 2120 L Street, NW., Washington, DC 20555, and in a Local Public Document Room(s) located near the site identified in the Staff Site Report. The Staff shall also send a copy of the report to the Governor or other appropriate official of the State in which the site is located, and to the chief executive of the municipality in which the site is located or, if the site is not located in a municipality, to the chief executive of the county.

5. Any Staff Site Report prepared and issued in accordance with this appendix may be incorporated by reference, as appropriate, in an application for a construction permit for a utilization facility which is subject to § 51.20(b) of this chapter and is of the type specified in § 50.21(b) (2) or (3) or § 50.22 of this chapter or is a testing facility. The conclusions of the Staff Site Report will be reexamined by the staff where five years or more have elapsed between the issuance of the Staff Site Report and its incorporation by reference in a construction permit application.

6. Issuance of a Staff Site Report shall not constitute a commitment to issue a permit or license, to permit on-site work under § 50.10(e), or in any way affect the authority of the Commission, Atomic Safety and Licensing Appeal Panel, Atomic Safety and Licensing Board, and other presiding officers in any proceeding under Subpart F and/or G of Part 2 of this chapter.

7. The staff will not conduct more than one review of site suitability issues with regard to a particular site prior to the full construction permit review required by Subpart A of Part 51 of this chapter. The staff may decline to prepare and issue a Staff Site Report in response to a submittal under this appendix where it appears that, (a) in cases where no review of the relative merits of the submitted site and alternative sites under Subpart A of Part 51 of this chapter is requested, there is a reasonable likelihood that further Staff review would identify one or more preferable alternative sites and the Staff review of one or more site suitability issues would lead to an irreversible and irretrievable commitment of resources prior to the submittal of the analysis of alternative sites in the Environmental Report that would prejudice the later review and decision on alternative sites under Subpart F and/or G of Part 2 and Subpart A of Part 51 of this chapter; or (b) in cases where, in the judgment of the Staff, early review of any site suitability issue or issues would not be in the public interest, considering (1) the degree of likelihood that any early findings on those issues would retain their validity in later reviews, (2) the objections, if any, of cognizant state or local government agencies to the conduct of an early review on those issues, and (3) the possible effect on the public interest of having an early, if not necessarily conclusive, resolution of those issues.

[42 FR 22887, May 5, 1977, as amended at 49 FR 9405, Mar. 12, 1984; 51 FR 40311, Nov. 6, 1986; 53 FR 43420, Oct. 27, 1988]

APPENDIX R—FIRE PROTECTION PROGRAM FOR NUCLEAR POWER FACILITIES OPERATING PRIOR TO JANUARY 1, 1979

I. INTRODUCTION AND SCOPE

This appendix applies to licensed nuclear power electric generating stations that were operating prior to January 1, 1979, except to the extent set forth in § 50.48(b) of this part. With respect to certain generic issues for such facilities it sets forth fire protection features required to satisfy Criterion 3 of Appendix A to this part.[1]

Criterion 3 of Appendix A to this part specifies that "Structures, systems, and components important to safety shall be designed and located to minimize, consistent with other safety requirements, the probability and effect of fires and explosions."

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[1] Clarification and guidance with respect to permissible alternatives to satisfy Appendix A to BTP APCSB 9.5-1 has been provided in four other NRC documents:

"Supplementary Guidance on Information Needed for Fire Protection Evaluation," dated October 21, 1976;

"Sample Technical Specification," dated May 12, 1977;

"Nuclear Plant Fire Protection Functional Responsibilities, Administrative Control and Quality Assurance," dated June 14, 1977;

"Manpower Requirements for Operating Reactors," dated May 11, 1978.

A Fire Protection Safety Evaluation Report that has been issued for each operating plant states how these guidelines were applied to each facility and identifies open fire protection issues that will be resolved when the facility satisfies the appropriate requirements of Appendix R to Part 50.

When considering the effects of fire, those systems associated with achieving and maintaining safe shutdown conditions assume major importance to safety because damage to them can lead to core damage resulting from loss of coolant through boiloff.

The phrases "important to safety," or "safety-related," will be used throughout this Appendix R as applying to all safety functions. The phrase "safe shutdown" will be used throughout this appendix as applying to both hot and cold shutdown functions.

Because fire may affect safe shutdown systems and because the loss of function of systems used to mitigate the consequences of design basis accidents under postfire conditions does not per se impact public safety, the need to limit fire damage to systems required to achieve and maintain safe shutdown conditions is greater than the need to limit fire damage to those systems required to mitigate the consequences of design basis accidents. Three levels of fire damage limits are established according to the safety functions of the structure, system, or component:

Safety function	Fire damage limits
Hot Shutdown	One train of equipment necessary to achieve hot shutdown from either the control room or emergency control station(s) must be maintained free of fire damage by a single fire, including an exposure fire.[1]
Cold Shutdown	Both trains of equipment necessary to achieve cold shutdown may be damaged by a single fire, including an exposure fire, but damage must be limited so that at least one train can be repaired or made operable within 72 hours using onsite capability.
Design Basis Accidents.	Both trains of equipment necessary for mitigation of consequences following design basis accidents may be damaged by a single exposure fire.

[1] *Exposure Fire.* An exposure fire is a fire in a given area that involves either in situ or transient combustibles and is external to any structures, systems, or components located in or adjacent to that same area. The effects of such fire (e.g., smoke, heat, or ignition) can adversely affect those structures, systems, or components important to safety. Thus, a fire involving one train of safe shutdown equipment may constitute an exposure fire for the redundant train located in the same area, and a fire involving combustibles other than either redundant train may constitute an exposure fire to both redundant trains located in the same area.

The most stringent fire damage limit shall apply for those systems that fall into more than one category. Redundant systems used to mitigate the consequences of other design basis accidents but not necessary for safe shutdown may be lost to a single exposure fire. However, protection shall be provided so that a fire within only one such system will not damage the redundant system.

II. GENERAL REQUIREMENTS

A. *Fire protection program.* A fire protection program shall be established at each nuclear power plant. The program shall establish the fire protection policy for the protection of structures, systems, and components important to safety at each plant and the procedures, equipment, and personnel required to implement the program at the plant site.

The fire protection program shall be under the direction of an individual who has been delegated authority commensurate with the responsibilities of the position and who has available staff personnel knowledgeable in both fire protection and nuclear safety.

The fire protection program shall extend the concept of defense-in-depth to fire protection in fire areas important to safety, with the following objectives:

- To prevent fires from starting;
- To detect rapidly, control, and extinguish promptly those fires that do occur;
- To provide protection for structures, systems, and components important to safety so that a fire that is not promptly extinguished by the fire suppression activities will not prevent the safe shutdown of the plant.

B. *Fire hazards analysis.* A fire hazards analysis shall be performed by qualified fire protection and reactor systems engineers to (1) consider potential in situ and transient fire hazards; (2) determine the consequences of fire in any location in the plant on the ability to safely shut down the reactor or on the ability to minimize and control the release of radioactivity to the environment; and (3) specify measures for fire prevention, fire detection, fire suppression, and fire containment and alternative shutdown capability as required for each fire area containing structures, systems, and components important to safety in accordance with NRC guidelines and regulations.

C. *Fire prevention features.* Fire protection features shall meet the following general requirements for all fire areas that contain or present a fire hazard to structures, systems, or components important to safety.

1. In situ fire hazards shall be identified and suitable protection provided.

2. Transient fire hazards associated with normal operation, maintenance, repair, or modification activities shall be identified and eliminated where possible. Those transient fire hazards that can not be eliminated shall be controlled and suitable protection provided.

3. Fire detection systems, portable extinguishers, and standpipe and hose stations shall be installed.

4. Fire barriers or automatic suppression systems or both shall be installed as necessary to protect redundant systems or components necessary for safe shutdown.

5. A site fire brigade shall be established, trained, and equipped and shall be on site at all times.

6. Fire detection and suppression systems shall be designed, installed, maintained, and tested by personnel properly qualified by experience and training in fire protection systems.

7. Surveillance procedures shall be established to ensure that fire barriers are in place and that fire suppression systems and components are operable.

D. *Alternative or dedicated shutdown capability.* In areas where the fire protection features cannot ensure safe shutdown capability in the event of a fire in that area, alternative or dedicated safe shutdown capability shall be provided.

III. SPECIFIC REQUIREMENTS

A. *Water supplies for fire suppression systems.* Two separate water supplies shall be provided to furnish necessary water volume and pressure to the fire main loop.

Each supply shall consist of a storage tank, pump, piping, and appropriate isolation and control valves. Two separate redundant suctions in one or more intake structures from a large body of water (river, lake, etc.) will satisfy the requirement for two separated water storage tanks. These supplies shall be separated so that a failure of one supply will not result in a failure of the other supply.

Each supply of the fire water distribution system shall be capable of providing for a period of 2 hours the maximum expected water demands as determined by the fire hazards analysis for safety-related areas or other areas that present a fire exposure hazard to safety-related areas.

When storage tanks are used for combined service-water/fire-water uses the minimum volume for fire uses shall be ensured by means of dedicated tanks or by some physical means such as a vertical standpipe for other water service. Administrative controls, including locks for tank outlet valves, are unacceptable as the only means to ensure minimum water volume.

Other water systems used as one of the two fire water supplies shall be permanently connected to the fire main system and shall be capable of automatic alignment to the fire main system. Pumps, controls, and power supplies in these systems shall satisfy the requirements for the main fire pumps. The use of other water systems for fire protection shall not be incompatible with their functions required for safe plant shutdown. Failure of the other system shall not degrade the fire main system.

B. *Sectional isolation valves.* Sectional isolation valves such as post indicator valves or key operated valves shall be installed in the fire main loop to permit isolation of portions of the fire main loop for maintenance or repair without interrupting the entire water supply.

C. *Hydrant isolation valves.* Valves shall be installed to permit isolation of outside hydrants from the fire main for maintenance or repair without interrupting the water supply to automatic or manual fire suppression systems in any area containing or presenting a fire hazard to safety-related or safe shutdown equipment.

D. *Manual fire suppression.* Standpipe and hose systems shall be installed so that at least one effective hose stream will be able to reach any location that contains or presents an exposure fire hazard to structures, systems, or components important to safety.

Access to permit effective functioning of the fire brigade shall be provided to all areas that contain or present an exposure fire hazard to structures, systems, or components important to safety.

Standpipe and hose stations shall be inside PWR containments and BWR containments that are not inerted. Standpipe and hose stations inside containment may be connected to a high quality water supply of sufficient quantity and pressure other than the fire main loop if plant-specific features prevent extending the fire main supply inside containment. For BWR drywells, standpipe and hose stations shall be placed outside the dry well with adequate lengths of hose to reach any location inside the dry well with an effective hose stream.

E. *Hydrostatic hose tests.* Fire hose shall be hydrostatically tested at a pressure of 150 psi or 50 psi above maximum fire main operating pressure, whichever is greater. Hose stored in outside hose houses shall be tested annually. Interior standpipe hose shall be tested every three years.

F. *Automatic fire detection.* Automatic fire detection systems shall be installed in all areas of the plant that contain or present an exposure fire hazard to safe shutdown or safety-related systems or components. These fire detection systems shall be capable of operating with or without offsite power.

G. *Fire protection of safe shutdown capability.* 1. Fire protection features shall be provided for structures, systems, and components important to safe shutdown. These features shall be capable of limiting fire damage so that:

a. One train of systems necessary to achieve and maintain hot shutdown conditions from either the control room or emergency control station(s) is free of fire damage; and

b. Systems necessary to achieve and maintain cold shutdown from either the control room or emergency control station(s) can be repaired within 72 hours.

2. Except as provided for in paragraph G.3 of this section, where cables or equipment, including associated non-safety circuits that could prevent operation or cause maloperation due to hot shorts, open circuits, or shorts to ground, of redundant trains of systems necessary to achieve and maintain hot shutdown conditions are located within the same fire area outside of primary containment, one of the following means of ensuring that one of the redundant trains is free of fire damage shall be provided:

a. Separation of cables and equipment and associated non-safety circuits of redundant trains by a fire barrier having a 3-hour rating. Structural steel forming a part of or supporting such fire barriers shall be protected to provide fire resistance equivalent to that required of the barrier;

b. Separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustible or fire hazards. In addition, fire detectors and an automatic fire suppression system shall be installed in the fire area; or

c. Enclosure of cable and equipment and associated non-safety circuits of one redundant train in a fire barrier having a 1-hour rating. In addition, fire detectors and an automatic fire suppression system shall be installed in the fire area;

Inside noninerted containments one of the fire protection means specified above or one of the following fire protection means shall be provided:

d. Separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards;

e. Installation of fire detectors and an automatic fire suppression system in the fire area; or

f. Separation of cables and equipment and associated non-safety circuits of redundant trains by a noncombustible radiant energy shield.

3. Alternative or dedicated shutdown capability and its associated circuits,[3] independent of cables, systems or components in the area, room or zone under consideration, shall be provided:

a. Where the protection of systems whose function is required for hot shutdown does not satisfy the requirement of paragraph G.2 of this section; or

b. Where redundant trains of systems required for hot shutdown located in the same fire area may be subject to damage from fire suppression activities or from the rupture or inadvertent operation of fire suppression systems.

In addition, fire detection and a fixed fire suppression system shall be installed in the area, room, or zone under consideration.

H. *Fire brigade.* A site fire brigade trained and equipped for fire fighting shall be established to ensure adequate manual fire fighting capability for all areas of the plant containing structures, systems, or components important to safety. The fire brigade shall be at least five members on each shift. The brigade leader and at least two brigade members shall have sufficient training in or knowledge of plant safety-related systems to understand the effects of fire and fire suppressants on safe shutdown capability. The qualification of fire brigade members shall include an annual physical examination to determine their ability to perform strenuous fire fighting activities. The shift supervisor shall not be a member of the fire brigade. The brigade leader shall be competent to assess the potential safety consequences of a fire and advise control room personnel. Such competence by the brigade leader may be evidenced by possession of an operator's license or equivalent knowledge of plant safety-related systems.

The minimum equipment provided for the brigade shall consist of personal protective equipment such as turnout coats, boots, gloves, hard hats, emergency communications equipment, portable lights, portable ventilation equipment, and portable extinguishers. Self-contained breathing apparatus using full-face positive-pressure masks approved by NIOSH (National Institute for Occupational Safety and Health—approval formerly given by the U.S. Bureau of Mines) shall be provided for fire brigade, damage control, and control room personnel. At least 10 masks shall be available for fire brigade personnel. Control room personnel may be furnished breathing air by a manifold system piped from a storage reservoir if practical. Service or rated operating life shall be a minimum of one-half hour for the self-contained units.

At least a 1-hour supply of breathing air in extra bottles shall be located on the plant site for each unit of self-contained breathing appratus. In addition, an onsite 6-hour supply of reserve air shall be provided and arranged to permit quick and complete replenishment of exhausted air supply bottles as they are returned. If compressors are used as a source of breathing air, only units approved for breathing air shall be used and the compressors shall be operable assuming a loss of offsite power. Special care must be taken to locate the compressor in areas free of dust and contaminants.

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[3] Alternative shutdown capability is provided by rerouting, relocating or modificating of existing systems; dedicated shutdown capability is provided by installing new structures and systems for the function of post-fire shutdown.

I. *Fire brigade training.* The fire brigade training program shall ensure that the capability to fight potential fires is established and maintained. The program shall consist of an initial classroom instruction program followed by periodic classroom instruction, fire fighting practice, and fire drills:

1. *Instruction*

a. The initial classroom instruction shall include:

(1) Indoctrination of the plant fire fighting plan with specific identification of each individual's responsibilities.

(2) Identification of the type and location of fire hazards and associated types of fires that could occur in the plant.

(3) The toxic and corrosive characteristics of expected products of combustion.

(4) Identification of the location of fire fighting equipment for each fire area and familiarization with the layout of the plant, including access and egress routes to each area.

(5) The proper use of available fire fighting equipment and the correct method of fighting each type of fire. The types of fires covered should include fires in energized electrical equipment, fires in cables and cable trays, hydrogen fires, fires involving flammable and combustible liquids or hazardous process chemicals, fires resulting from construction or modifications (welding), and record file fires.

(6) The proper use of communication, lighting, ventilation, and emergency breathing equipment.

(7) The proper method for fighting fires inside buildings and confined spaces.

(8) The direction and coordination of the fire fighting activities (fire brigade leaders only).

(9) Detailed review of fire fighting strategies and procedures.

(10) Review of the latest plant modifications and corresponding changes in fire fighting plans.

NOTE: Items (9) and (10) may be deleted from the training of no more than two of the non-operations personnel who may be assigned to the fire brigade.

b. The instruction shall be provided by qualified individuals who are knowledgeable, experienced, and suitably trained in fighting the types of fires that could occur in the plant and in using the types of equipment available in the nuclear power plant.

c. Instruction shall be provided to all fire brigade members and fire brigade leaders.

d. Regular planned meetings shall be held at least every 3 months for all brigade members to review changes in the fire protection program and other subjects as necessary.

e. Periodic refresher training sessions shall be held to repeat the classroom instruction program for all brigade members over a two-year period. These sessions may be concurrent with the regular planned meetings.

2. *Practice*

Practice sessions shall be held for each shift fire brigade on the proper method of fighting the various types of fires that could occur in a nuclear power plant. These sessions shall provide brigade members with experience in actual fire extinguishment and the use of emergency breathing apparatus under strenuous conditions encountered in fire fighting. These practice sessions shall be provided at least once per year for each fire brigade member.

3. *Drills*

a. Fire brigade drills shall be performed in the plant so that the fire brigade can practice as a team.

b. Drills shall be performed at regular intervals not to exceed 3 months for each shift fire brigade. Each fire brigade member should participate in each drill, but must participate in at least two drills per year.

A sufficient number of these drills, but not less than one for each shift fire brigade per year, shall be unannounced to determine the fire fighting readiness of the plant fire brigade, brigade leader, and fire protection systems and equipment. Persons planning and authorizing an unannounced drill shall ensure that the responding shift fire brigade members are not aware that a drill is being planned until it is begun. Unannounced drills shall not be scheduled closer than four weeks.

At least one drill per year shall be performed on a "back shift" for each shift fire brigade.

c. The drills shall be preplanned to establish the training objectives of the drill and shall be critiqued to determine how well the training objectives have been met. Unannounced drills shall be planned and critiqued by members of the management staff responsible for plant safety and fire protection. Performance deficiencies of a fire brigade or of individual fire brigade members shall be remedied by scheduling additional training for the brigade or members. Unsatisfactory drill performance shall be followed by a repeat drill within 30 days.

d. At 3-year intervals, a randomly selected unannounced drill must be critiqued by qualified individuals independent of the licensee's staff. A copy of the written report from these individuals must be available for

NRC review and shall be retained as a record as specified in section III.I.4 of this appendix.

e. Drills shall as a minimum include the following:

(1) Assessment of fire alarm effectiveness, time required to notify and assemble fire brigade, and selection, placement and use of equipment, and fire fighting strategies.

(2) Assessment of each brigade member's knowledge of his or her role in the fire fighting strategy for the area assumed to contain the fire. Assessment of the brigade member's conformance with established plant fire fighting procedures and use of fire fighting equipment, including self-contained emergency breathing apparatus, communication equipment, and ventilation equipment, to the extent practicable.

(3) The simulated use of fire fighting equipment required to cope with the situation and type of fire selected for the drill. The area and type of fire chosen for the drill should differ from those used in the previous drill so that brigade members are trained in fighting fires in various plant areas. The situation selected should simulate the size and arrangement of a fire that could reasonably occur in the area selected, allowing for fire development due to the time required to respond, to obtain equipment, and organize for the fire, assuming loss of automatic suppression capability.

(4) Assessment of brigade leader's direction of the fire fighting effort as to thoroughness, accuracy, and effectiveness.

4. *Records*

Individual records of training provided to each fire brigade member, including drill critiques, shall be maintained for at least 3 years to ensure that each member receives training in all parts of the training program. These records of training shall be available for NRC review. Retraining or broadened training for fire fighting within buildings shall be scheduled for all those brigade members whose performance records show deficiencies.

J. *Emergency lighting.* Emergency lighting units with at least an 8-hour battery power supply shall be provided in all areas needed for operation of safe shutdown equipment and in access and egress routes thereto.

K. *Administrative controls.* Administrative controls shall be established to minimize fire hazards in areas containing structures, systems, and components important to safety. These controls shall establish procedures to:

1. Govern the handling and limitation of the use of ordinary combustible materials, combustible and flammable gases and liquids, high efficiency particulate air and charcoal filters, dry ion exchange resins, or other combustible supplies in safety-related areas.

2. Prohibit the storage of combustibles in safety-related areas or establish designated storage areas with appropriate fire protection.

3. Govern the handling of and limit transient fire loads such as combustible and flammable liquids, wood and plastic products, or other combustible materials in buildings containing safety-related systems or equipment during all phases of operating, and especially during maintenance, modification, or refueling operations.

4. Designate the onsite staff member responsible for the inplant fire protection review of proposed work activities to identify potential transient fire hazards and specify required additional fire protection in the work activity procedure.

5. Govern the use of ignition sources by use of a flame permit system to control welding, flame cutting, brazing, or soldering operations. A separate permit shall be issued for each area where work is to be done. If work continues over more than one shift, the permit shall be valid for not more than 24 hours when the plant is operating or for the duration of a particular job during plant shutdown.

6. Control the removal from the area of all waste, debris, scrap, oil spills, or other combustibles resulting from the work activity immediately following completion of the activity, or at the end of each work shift, whichever comes first.

7. Maintain the periodic housekeeping inspections to ensure continued compliance with these administrative controls.

8. Control the use of specific combustibles in safety-related areas. All wood used in safety-related areas during maintenance, modification, or refueling operations (such as lay-down blocks or scaffolding) shall be treated with a flame retardant. Equipment or supplies (such as new fuel) shipped in untreated combustible packing containers may be unpacked in safety-related areas if required for valid operating reasons. However, all combustible materials shall be removed from the area immediately following the unpacking. Such transient combustible material, unless stored in approved containers, shall not be left unattended during lunch breaks, shift changes, or other similar periods. Loose combustible packing material such as wood or paper excelsior, or polyethylene sheeting shall be placed in metal containers with tight-fitting self-closing metal covers.

9. Control actions to be taken by an individual discovering a fire, for example, notification of control room, attempt to extinguish fire, and actuation of local fire suppression systems.

10. Control actions to be taken by the control room operator to determine the need for brigade assistance upon report of a fire

or receipt of alarm on control room annunciator panel, for example, announcing location of fire over PA system, sounding fire alarms, and notifying the shift supervisor and the fire brigade leader of the type, size, and location of the fire.

11. Control actions to be taken by the fire brigade after notification by the control room operator of a fire, for example, assembling in a designated location, receiving directions from the fire brigade leader, and discharging specific fire fighting responsibilities including selection and transportation of fire fighting equipment to fire location, selection of protective equipment, operating instructions for use of fire suppression systems, and use of preplanned strategies for fighting fires in specific areas.

12. Define the strategies for fighting fires in all safety-related areas and areas presenting a hazard to safety-related equipment. These strategies shall designate:

a. Fire hazards in each area covered by the specific prefire plans.

b. Fire extinguishants best suited for controlling the fires associated with the fire hazards in that area and the nearest location of these extinguishants.

c. Most favorable direction from which to attack a fire in each area in view of the ventilation direction, access hallways, stairs, and doors that are most likely to be free of fire, and the best station or elevation for fighting the fire. All access and egress routes that involve locked doors should be specifically identified in the procedure with the appropriate precautions and methods for access specified.

d. Plant systems that should be managed to reduce the damage potential during a local fire and the location of local and remote controls for such management (e.g., any hydraulic or electrical systems in the zone covered by the specific fire fighting procedure that could increase the hazards in the area because of overpressurization or electrical hazards).

e. Vital heat-sensitive system components that need to be kept cool while fighting a local fire. Particularly hazardous combustibles that need cooling should be designated.

f. Organization of fire fighting brigades and the assignment of special duties according to job title so that all fire fighting functions are covered by any complete shift personnel complement. These duties include command control of the brigade, transporting fire suppression and support equipment to the fire scenes, applying the extinguishant to the fire, communication with the control room, and coordination with outside fire departments.

g. Potential radiological and toxic hazards in fire zones.

h. Ventilation system operation that ensures desired plant air distribution when the ventilation flow is modified for fire containment or smoke clearing operations.

i. Operations requiring control room and shift engineer coordination or authorization.

j. Instructions for plant operators and general plant personnel during fire.

L. *Alternative and dedicated shutdown capability.* 1. Alternative or dedicated shutdown capability provided for a specific fire area shall be able to (a) achieve and maintain subcritical reactivity conditions in the reactor; (b) maintain reactor coolant inventory; (c) achieve and maintain hot standby [3] conditions for a PWR (hot shutdown [3] for a BWR); (d) achieve cold shutdown conditions within 72 hours; and (e) maintain cold shutdown conditions thereafter. During the postfire shutdown, the reactor coolant system process variables shall be maintained within those predicted for a loss of normal a.c. power, and the fission product boundary integrity shall not be affected; i.e., there shall be no fuel clad damage, rupture of any primary coolant boundary, of rupture of the containment boundary.

2. The performance goals for the shutdown functions shall be:

a. The reactivity control function shall be capable of achieving and maintaining cold shutdown reactivity conditions.

b. The reactor coolant makeup function shall be capable of maintaining the reactor coolant level above the top of the core for BWRs and be within the level indication in the pressurizer for PWRs.

c. The reactor heat removal function shall be capable of achieving and maintaining decay heat removal.

d. The process monitoring function shall be capable of providing direct readings of the process variables necessary to perform and control the above functions.

e. The supporting functions shall be capable of providing the process cooling, lubrication, etc., necessary to permit the operation of the equipment used for safe shutdown functions.

3. The shutdown capability for specific fire areas may be unique for each such area, or it may be one unique combination of systems for all such areas. In either case, the alternative shutdown capability shall be independent of the specific fire area(s) and shall accommodate postfire conditions where offsite power is available and where offsite power is not available for 72 hours. Procedures shall be in effect to implement this capability.

4. If the capability to achieve and maintain cold shutdown will not be available because of fire damage, the equipment and

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[3] As defined in the Standard Technical Specifications.

systems comprising the means to achieve and maintain the hot standby or hot shutdown condition shall be capable of maintaining such conditions until cold shutdown can be achieved. If such equipment and systems will not be capable of being powered by both onsite and offsite electric power systems because of fire damage, an independent onsite power system shall be provided. The number of operating shift personnel, exclusive of fire brigade members, required to operate such equipment and systems shall be on site at all times.

5. Equipment and systems comprising the means to achieve and maintain cold shutdown conditions shall not be damaged by fire; or the fire damage to such equipment and systems shall be limited so that the systems can be made operable and cold shutdown can be achieved within 72 hours. Materials for such repairs shall be readily available on site and procedures shall be in effect to implement such repairs. If such equipment and systems used prior to 72 hours after the fire will not be capable of being powered by both onsite and offsite electric power systems because of fire damage, an independent onsite power system shall be provided. Equipment and systems used after 72 hours may be powered by offsite power only.

6. Shutdown systems installed to ensure postfire shutdown capability need not be designed to meet seismic Category I criteria, single failure criteria, or other design basis accident criteria, except where required for other reasons, e.g., because of interface with or impact on existing safety systems, or because of adverse valve actions due to fire damage.

7. The safe shutdown equipment and systems for each fire area shall be known to be isolated from associated non-safety circuits in the fire area so that hot shorts, open circuits, or shorts to ground in the associated circuits will not prevent operation of the safe shutdown equipment. The separation and barriers between trays and conduits containing associated circuits of one safe shutdown division and trays and conduits containing associated circuits or safe shutdown cables from the redundant division, or the isolation of these associated circuits from the safe shutdown equipment, shall be such that a postulated fire involving associated circuits will not prevent safe shutdown.[4]

M. *Fire barrier cable penetration seal qualification.* Penetration seal designs shall utilize only noncombustible materials and shall be qualified by tests that are comparable to tests used to rate fire barriers. The acceptance criteria for the test shall include:

1. The cable fire barrier penetration seal has withstood the fire endurance test without passage of flame or ignition of cables on the unexposed side for a period of time equivalent to the fire resistance rating required of the barrier;

2. The temperature levels recorded for the unexposed side are analyzed and demonstrate that the maximum temperature is sufficiently below the cable insulation ignition temperature; and

3. The fire barrier penetration seal remains intact and does not allow projection of water beyond the unexposed surface during the hose stream test.

N. *Fire doors.* Fire doors shall be self-closing or provided with closing mechanisms and shall be inspected semiannually to verify that automatic hold-open, release, and closing mechanisms and latches are operable.

One of the following measures shall be provided to ensure they will protect the opening as required in case of fire:

1. Fire doors shall be kept closed and electrically supervised at a continuously manned location;

2. Fire doors shall be locked closed and inspected weekly to verify that the doors are in the closed position;

3. Fire doors shall be provided with automatic hold-open and release mechanisms and inspected daily to verify that doorways are free of obstructions; or

4. Fire doors shall be kept closed and inspected daily to verify that they are in the closed position.

The fire brigade leader shall have ready access to keys for any locked fire doors.

Areas protected by automatic total flooding gas suppression systems shall have electrically supervised self-closing fire doors or shall satisfy option 1 above.

O. *Oil collection system for reactor coolant pump.* The reactor coolant pump shall be equipped with an oil collection system if the containment is not inerted during normal operation. The oil collection system shall be so designed, engineered, and installed that failure will not lead to fire during normal or design basis accident conditions and that there is reasonable assurance that the system will withstand the Safe Shutdown Earthquake.[5]

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[4] An acceptable method of complying with this alternative would be to meet Regulatory Guide 1.75 position 4 related to associated circuits and IEEE Std 384-1974 (Section 4.5) where trays from redundant safety divisions are so protected that postulated fires affect trays from only one safety division.

[5] See Regulatory Guide 1.29—"Seismic Design Classification" paragraph C.2.

Such collection systems shall be capable of collecting lube oil from all potential pressurized and unpressurized leakage sites in the reactor coolant pump lube oil systems. Leakage shall be collected and drained to a vented closed container that can hold the entire lube oil system inventory. A flame arrester is required in the vent if the flash point characteristics of the oil present the hazard of fire flashback. Leakage points to be protected shall include lift pump and piping, overflow lines, lube oil cooler, oil fill and drain lines and plugs, flanged connections on oil lines, and lube oil reservoirs where such features exist on the reactor coolant pumps. The drain line shall be large enough to accommodate the largest potential oil leak.

[45 FR 76611, Nov. 19, 1980; 46 FR 44735, Sept. 8, 1981, as amended at 53 FR 19251, May 27, 1988]

FINDING AIDS

A list of CFR titles, subtitles, chapters, subchapters and parts and an alphabetical list of agencies publishing in the CFR are included in the CFR Index and Finding Aids volume to the Code of Federal Regulations which is published separately and revised annually.

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Table of CFR Titles and Chapters
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List of CFR Sections Affected

Material Approved for Incorporation by Reference

The Director of the Federal Register has approved under 5 U.S.C. 552(a) and 1 CFR Part 51 the incorporation by reference of the following publications. This list contains only those incorporations by reference effective as of the revision date of this volume. Incorporations by reference found within a regulation are effective upon the effective date of that regulation. For more information on incorporation by reference, see the preliminary pages of this volume.

10 CFR CHAPTER I (PARTS 0–50)
NUCLEAR REGULATORY COMMISSION

Each of the following documents is available for inspection at the Nuclear Regulatory Commission's Library, 7920 Norfolk Ave., Bethesda, MD. The individual documents are available through the sources listed below.

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